MODERN BUSINESS

HF
5006
M72
v.17 Patterson -

Southern Branch
of the
University of California
Los Angeles

Form L 1

HF
5006
M72
V.17

This book is DUE on the last date stamped below

FEB 20 1945

Form L-9–15*m*-8.'26

Modern Business

A SERIES OF TEXTS PREPARED AS PART OF THE MODERN BUSINESS COURSE AND SERVICE OF THE ALEXANDER HAMILTON INSTITUTE

ALEXANDER HAMILTON INSTITUTE
NEW YORK

79525

Modern Business

EDITOR-IN-CHIEF

JOSEPH FRENCH JOHNSON

Dean, New York University School of
Commerce, Accounts and Finance

MANAGING EDITOR

Roland P. Falkner

ASSOCIATE EDITORS

Leo Greendlinger, Charles W. Hurd

Volume	*Titles*	*Authors*
1.	Business and the Man	Joseph French Johnson
2.	Economics of Business	The Editors
3.	Organization and Control	Charles W. Gerstenberg
4.	Plant Management	Dexter S. Kimball
5.	Marketing and Merchandising	The Editors
6.	Advertising Principles	Herbert F. de Bower
7.	Salesmanship and Sales Management	John G. Jones
8.	Credit and the Credit Man	The Editors
9.	Accounting Principles	The Editors
10.	Cost Finding	Dexter S. Kimball
11.	Corporation Finance	William H. Walker
12.	Business Correspondence	Harrison McJohnston
13.	Advertising Campaigns	Mac Martin
14.	Railway Traffic	Edwin J. Clapp
15.	Foreign Trade and Shipping	J. Anton de Haas
16.	Banking	Major B. Foster
17.	Domestic and Foreign Exchange	E. L. Stewart Patterson
18.	Insurance	The Editors
19.	Office Management	The Editors
20.	The Exchanges and Speculation	Albert W. Atwood
21.	Accounting Practice and Auditing	John T. Madden
22.	Financial and Business Statements	Leo Greendlinger
23.	Investment	Edward D. Jones
24.	Business and the Government	Jeremiah W. Jenks

DOMESTIC AND FOREIGN EXCHANGE

BY

E. L. STEWART PATTERSON

Superintendent of Eastern Township Branches,
Canadian Bank of Commerce

MODERN BUSINESS

VOLUME 17

ALEXANDER HAMILTON INSTITUTE
NEW YORK

COPYRIGHT, 1918, 1919, BY
ALEXANDER HAMILTON INSTITUTE

COPYRIGHT IN GREAT BRITAIN, 1918, 1919, BY
ALEXANDER HAMILTON INSTITUTE

The title and contents of this volume as well as the business growing out of it, are further protected by laws relating to trade marks and unfair trade. All rights reserved, including translation into Scandinavian.

Registered trade mark, Reg. U. S. Pat. Off., Marca Registrada, M. de F.

MADE IN U. S. A.

PREFACE

There is nothing mysterious or difficult about foreign exchange when it is studied in the light of domestic exchange, which is easily understood, and in this volume I have endeavored to explain the essential principles of both domestic and foreign exchange in simple language, and with suitable illustrations. In this volume practically every form of exchange has been dealt with, and it is hoped that it will prove useful to the exporter and importer, as well as to business men in general, who are interested in the general aspects of the subject.

The tables dealing with gold values are all original calculations, based on data obtained from the various mints, while for some of the silver values I am indebted to Mr. Gonzales' excellent little book "Modern Foreign Exchange," and for general matter to my own book, "Notes on Foreign Exchange."

I have also to acknowledge my indebtedness to Mr. Major B. Foster for valuable assistance in writing the two chapters on Domestic Exchange, particularly the second chapter dealing with the exchange situation in the United States.

E. L. Stewart Patterson.

Sherbrooke, Que.

TABLE OF CONTENTS

CHAPTER I

DOMESTIC EXCHANGE

1. Definition of Domestic and Foreign Exchange . 1
2. Payments between Denver and Tampa . . . 1
3. Check on Debtor's Bank 2
4. Check or Draft on New York Bank 4
5. Demand for New York Exchange in Denver . . 4
6. Supply of New York Exchange in Denver . . 5
7. An Illustration 6
8. Currency Shipments 7
9. Cost of New York Exchange 9
10. Settlements Thru the Sub-Treasuries 12
11. Equilibrium of Demand and Supply 13
12. Exchange Viewed as a Commodity 15

CHAPTER II

FEDERAL RESERVE BANK CLEARINGS

1. Collection of Country Checks 18
2. Federal Reserve System 19
3. Federal Reserve Clearing 20
4. When Proceeds Are Available 21
5. Member Banks Maintain Balances 22
6. Indorsement and Presentation of Items . . . 23
7. Charges for Collection 24
8. Rates of New York Clearing House Banks . . 25
9. An Illustration 26
10. Advantages and Disadvantages 28

SECTION PAGE
11. Success of the System 29
12. Gold Settlement Fund 30

CHAPTER III

GENERAL ASPECTS OF FOREIGN EXCHANGE

1. Definition of Foreign Exchange 32
2. How Indebtedness Between Two Countries Arises 32
3. Similarity Between Inland and Foreign Exchange 33
4. Expense of Shipping Gold 34
5. Training in Foreign Exchange 35
6. Mint Par of Exchange 36
7. Computing the Mint Par 37
8. Par of Exchange 38
9. Gold Points 39
10. Significance of Gold Movements 40
11. Actual Gold Points 41
12. War and Foreign Exchange 41
13. The Clearing Features of Foreign Exchange . 42
14. Buying and Selling Exchange 43
15. New York Demand for Sterling Exchange . . 44

CHAPTER IV

RATES OF EXCHANGE

1. Bills of Exchange and Their Relation to Gold . 46
2. Cost of Sterling Exchange 47
3. Rates of Exchange 48
4. What Makes the Rate 49
5. Coinage Ratio 50
6. Fluctuation in the Rate of Exchange . . . 50
7. Rates Tend to Correspond 51
8. Exchange Quotations 52
9. Range of the Nine Frequent Quotations . . . 53
10. Fixed and Movable Exchange 54

SECTION PAGE
11. Conversions 55
12. Conversion for Fixed Exchange 56
13. Conversion for Movable Exchange 57
14. Simple Arithmetic Involved 58
15. Exchange Tables 59

CHAPTER V

FOREIGN REMITTANCES

1. Non-Commercial Exchange 61
2. Principles Underlying the Issuance of Drafts . 62
3. Advices 64
4. Specimen Forms and Signatures 66
5. Cost of Drafts to Purchasers 66
6. Travelers' Checks 67
7. Payment of Checks 70
8. Payment to Holders 70
9. Redemption of Checks 71
10. Letter of Indication 72
11. Lost Travelers' Checks 73
12. Letters of Credit 74
13. Payment to the Holder 81
14. Circular Notes 82
15. Foreign Money Orders 82
16. Payment of Orders 85
17. Mail Remittances 86

CHAPTER VI

BILLS OF EXCHANGE

1. Bills of Exchange 89
2. Sight Drafts 90
3. Cable Transfers 94
4. Unusual Rates for Cables 95
5. Long Exchange 96

SECTION PAGE
6. Influence of the Interest Rate 98
7. Commercial Long Bills 100
8. Bankers' Long Bills 101
9. Bills of Exchange that Involve More or Less Risk 101
10. Letters of Credit 106

CHAPTER VII

A DAY IN AN EXCHANGE BOX

1. Practical Exchange 109
2. Demand Sterling Sold 110
3. Sterling Purchased 111
4. French Exchange 112
5. German Exchange 113
6. Sundry Drafts 114
7. Travelers' Checks 115
8. Issue of a Letter of Credit 116
9. Payment on Letter of Credit 116
10. Payment of a Travelers' Check 117
11. Commercial Letters of Credit 117

CHAPTER VIII

FOREIGN EXCHANGE AND EXPORTS

1. Interdependence of Exports and Imports . . 120
2. Origin and Supply of Foreign Exchange . . . 122
3. "The United States in Account with the World" 124
4. Commercial Bills of Exchange 128
5. Financing Exports by Means of Dollar Credits . 130
6. Dollar Acceptances 131
7. Export Letters of Credit 134

CHAPTER IX

FOREIGN EXCHANGE AND IMPORTS

1. Commercial Letters of Credit and Importing . 137
2. British Acceptances under Letters of Credit . . 138

SECTION PAGE
3. History of the Draft in London 139
4. Position of the Obligants on the Bill 140
5. The Part London Plays 141

CHAPTER X

FINANCE BILLS

1. Definition of a Finance Bill 144
2. Finance Bill for New York Account 145
3. Method of Using Finance Bills 146
4. Loan of a Finance Bill 148
5. A Finance Bill on London Account 149
6. Other Uses of Finance Bills 150
7. Forward Exchange 151

CHAPTER XI

ARBITRAGE

1. What Is Arbitrage? 155
2. When Arbitrage Is Transacted 155
3. Parity 157
4. Parity in Stocks 158
5. Claim Rule 159
6. Simple Arbitrage 160
7. Compound Arbitrage 162
8. Arbitrage in Gold 164

CHAPTER XII

RATES OF INTEREST

1. Interest an Important Factor in Exchange Quotations 166
2. Long Bills 166
3. Bank Rate 167
4. Market Rate 168
5. Retirement Rate 169

SECTION PAGE
6. Importance of the Bank of England Rate . . 169
7. What the Bank of England Rate Effects . . . 171

CHAPTER XIII

GOLD SHIPMENTS

1. Gold or Specie Points 174
2. Gold Values, London and New York 175
3. Gold Shipments from New York 176
4. Gold Shipments from New York to Ottawa . . 177
5. Shipments from Ottawa 180
6. Gold Imports During the War 181

CHAPTER XIV

STERLING EXCHANGE

1. London Market 185
2. Monetary System 186
3. Paper Money 187
4. Coinage of Gold 188
5. Stamps and Interest 190
6. How London Quotes Exchange 190
7. Rates of Exchange 191
8. Course of Exchange 193
9. American Quotations 195
10. Conversion 195
11. Profits 197
12. Purchase of Bills of Exchange 198

CHAPTER XV

FRENCH EXCHANGE

1. Paris Market 201
2. Latin Union 201
3. Monetary System 202
4. Stamp Duties and Interest 203

SECTION PAGE
5. How Paris Quotes Exchange 204
6. French Exchange in New York 205
7. Fractional Quotations 206
8. Profits 207
9. Purchase of French Long Bills 209

CHAPTER XVI

GERMAN EXCHANGE

1. The Berlin Market 212
2. Money 212
3. Stamp Duties 213
4. Interest Rates and Commercial Usages . . . 214
5. German Quotations 216
6. American Quotations 216
7. Conversions 217
8. Profits 219
9. Purchase of German Long Bills 220

CHAPTER XVII

EXCHANGE WITH OTHER COUNTRIES

1. Gold Basis of Exchange 222
2. Dutch Exchange 222
3. Exchange with Other Gold Standard Countries . 224
4. Exchange Quotations 225
5. Gold Exchange Standard 227
6. Philippine Islands 228
7. India 228
8. Argentina 229
9. Brazil 230
10. Silver Standard 232
11. China 233
12. Paper Currencies 234
13. Chile 236

CHAPTER XVIII

LONDON AND NEW YORK AS FINANCIAL CENTERS

SECTION		PAGE
1.	New York as a Financial Center	238
2.	The Reasons for London's Supremacy	239
3.	Physical Conditions Favorable to London	240
4.	Mail and Cable Facilities	241
5.	Time Advantages	242
6.	National Characteristics	243
7.	Willingness to Seek Fortune Abroad	244
8.	London Without Rivals at Home	244
9.	Influence of Custom and Tradition	246
10.	Economic Factors in London's Position	246
11.	Free Gold Market	247
12.	Liquid Discount Market	249
13.	Mercantile Navy and Tariff	251
14.	England's Foreign Trade	252
15.	New York's Present Dominance Temporary	254
16.	New York's Future	255

CHAPTER XIX

WAR AND THE EXCHANGES

1.	War and Its Effect on International Exchange	257
2.	Moratoria	259
3.	London and New York	262
4.	Gold Shipments from New York	263
5.	Payments Thru Ottawa	263
6.	New York Loans to Great Britain	264
7.	Great Britain	265
8.	Dutch Exchange	268
9.	Exchange in Other Countries	269
10.	New York	271
11.	Canada	274

SECTION PAGE
12. Germany 276
13. The Scandinavian Union 277

TABLES

1. Values of Foreign Coins 281
2. Moneys of Account Used in the Principal Countries of the World 284
3. Moneys in Actual Use 287
4. Money Symbols 292
Index 293

DOMESTIC AND FOREIGN EXCHANGE

CHAPTER I

DOMESTIC EXCHANGE

1. *Definition of domestic and foreign exchange.*—Domestic exchange is simply the term applied to the various methods of making payments between business men in different communities located within the same country. Foreign exchange refers to all payments made by the business men of one country to those of another country. An example of domestic exchange is furnished when Jones of Denver pays a debt to Smith in Toledo or to Swann in Tampa. Foreign exchange is involved when he remits to McDonald in Montreal or to Lubin in Paris.

2. *Payments between Denver and Tampa.*—Suppose Jones in Denver buys $1,000 worth of grape fruit from Swann in Tampa. He may make payment in any one of various ways. He may send bills in a registered letter, gold or currency by express, an express money order, a postal money order, a check on his own bank in Denver or elsewhere or a draft drawn by his own bank on some other bank. To send cash by registered letter or express or to send a money

order is too expensive and has other disadvantages.

Swann would be perfectly satisfied with a check or bank draft on his own bank or any bank in Tampa. How is Jones to get such an instrument? He has no banking connections in Florida, neither has his Denver bank. There are over twenty-seven thousand banking institutions in the United States. It is not reasonable to expect any one bank to maintain relations with all of them or even with one in each city. In nearly all cases it is impossible for a debtor to remit a draft or check on a bank in the creditor's city.

3. *Check on debtor's bank.*—Jones may simply draw a check on his Denver bank and mail that to Swann. This is convenient for Jones, but how about Swann? He gets a right to receive $1,000 in Denver. He wants it in Tampa, not in Denver. He must now undergo all the trouble and expense and delay of collecting it. This can be shifted to the Tampa banker by depositing the check, but the bank makes a charge for this service. The amount of commission, or "exchange," charged in such a case depends upon the size of the check and the trouble involved in collecting it. If Swann is a very important customer of the bank, he may receive full credit for the check deposited, the bank assuming the entire burden of collection.

A debtor imposes an unreasonable burden upon his creditor or his creditor's bank whenever he remits a check on his own local bank. When Jones buys grape fruit he has a definite understanding that the price

quoted is either for "f.o.b. Tampa" or for delivery in Denver. There should be just such an understanding with regard to the payment. A buyer is often requested to add a certain amount to the price quoted if he wishes to remit by check on his own bank.

The large number of wholly independent banks in the United States makes the collection of out-of-town checks often a slow process. Naturally, the depositor cannot expect to get the use of his funds until they have been collected by the bank. The delay involved, coupled with the high collection charge, usually causes a discrimination to be made against remittances in the form of local checks. This discrimination may become so great as to render the use of such checks prohibitive. When this is true, the debtor is forced to apply to his bank for a draft which will be acceptable in the city where the amount is to be paid.

Plainly, it would be impossible for each bank to keep balances in every other city in the country. It would be highly desirable for every bank in the country to be able to sell drafts on some one city. To do this they would be compelled either to keep funds on deposit with some bank in the central city or to keep balances with another bank that did. In either case, each of the two banks maintaining this relationship is called the "correspondent" of the other. If all the banks are attempting to maintain balances in some central city, it is evident that they will always be willing to accept on deposit drafts or checks drawn against the banks of that city; for they can send in these

drafts and checks and deposit them with their correspondents for credit, thus building up their balances.

4. *Check or draft on New York bank.*—New York is the city on which drafts are drawn for making payments between different communities in the United States. It was not necessary that the banks of the country should get together and arbitrarily decide to make New York a central city; it was not a matter of chance. New York is naturally the commercial as well as the financial center of the country. Merchants in every community are constantly buying goods from New York to an extent that is greater than the purchases from any other city. More payments are made to New York than to any other city. Consequently, New York is the city on which all the banks of the country usually sell drafts.

Not only are payments to New York made in New York exchange, but payments between different cities thruout the country are made in the same way. Denver remits to Tampa by using a draft on some New York bank. The Tampa bank is willing to accept the draft because it knows that it will have a call for New York exchange. The draft is forwarded to New York for credit against which the Tampa bank can draw.

5. *Demand for New York exchange in Denver.*—New York exchange may be looked upon as a commodity which is bought and sold like wheat or corn. It is really the right to money in New York. It has a value which fluctuates from time to time just as the

value of wheat does. To understand these changes in value it is necessary only to examine the conditions affecting the demand for and supply of the exchange.

Using Denver still, for example, what is it that gives rise to a demand for New York exchange in Denver? In other words, what causes business men in Denver to want a right to money in New York? The answer is simple. Whenever a business man there buys goods from New York, he needs New York funds for making payment. Likewise, whenever he buys goods from any city in the United States he is more than likely to remit in New York exchange, because he finds that to be most acceptable. Of course, the man in Denver does not carry an account with any New York bank. He gets his Denver bank to give him a draft on some New York bank in exchange for his check.

When it is taken into account that New York checks and drafts are being used in this way every day for the cancelation of debts in all parts of the United States, it will be readily understood why New York exchange is deservedly called "the business man's money."

6. *Supply of New York exchange in Denver.*—We may now inquire into the way Denver banks get their power to sell drafts on New York banks. How do they establish balances in New York against which to sell exchange? Their balances are established and maintained in three ways. First, whenever a Denver business man sells goods to someone in New York, or

in any other city in the United States for that matter, he is most likely to receive a draft on New York in payment. This draft he deposits with his local bank. His bank sends it to its correspondent in New York and thus builds up its balance there. Denver's supply of New York exchange, or right to money in New York, is built up then when Denver sells goods to other cities and receives New York drafts in payment. The second way is to ship cash to New York. The third is to borrow there and leave the proceeds on deposit. Of course, cash or drafts must be sent finally to extinguish the debt.

It is not necessary for the Denver bank to carry a balance in New York in order that it may sell New York exchange. It may maintain a deposit with some other bank, say in Chicago, or in St. Louis, which does keep a New York balance. In such a case it uses blank New York drafts furnished by its Chicago correspondent.

7. *An illustration.*—We will suppose that the Rocky Mountain Bank of Denver has on deposit $50,000 with the First National of Chicago. Now suppose that a Denver house has sold ore in Baltimore and has received in payment a draft for $10,000 on the Corn Exchange Bank of New York. The Denver house will deposit the draft in the Rocky Mountain Bank, which will send it to its Chicago correspondent, thereby increasing its balance to $60,000. The Chicago bank will send the draft to its correspondent in New York, say the National City Bank,

and so increase its balance by $10,000. The National City sends the draft thru the Clearing House and it is finally canceled at the Corn Exchange. The Corn Exchange debits the account of the Baltimore bank which originally drew the draft.

By an agreement with the First National Bank of Chicago, the Rocky Mountain Bank is able to sell drafts on the National City Bank of New York, using for the purpose blank drafts furnished by the First National. Jones comes in to get a $1,000 draft to pay Swann for his grape fruit. He draws his check for the amount, turns it over to the bank, receives a draft and sends it to Swann. Swann deposits it with his Tampa bank, which sends it to its correspondent in New York. If the correspondent is not the National City Bank, it sends the check thru the Clearing House to the National City, which debits the First National of Chicago. The First National, in turn, debits the Rocky Mountain and the matter is closed.

Thus the Denver bank, and every other bank in the United States, has a constant demand for New York exchange and a constant supply of it.

8. *Currency shipments.*—While in the long run the business men of Denver buy from other cities about as much as they sell to them, it would be a rare coincidence if the amounts should be exactly equal. During April, May and June almost any western city is likely to be buying more than it is selling. Moreover, the demand for circulation is low at that time in the West. Consequently, funds are freed for tem-

porary investment in the East. Most of the surplus funds are sent to New York and Chicago to be loaned at call. Whether funds are sent away to pay for goods or to invest, there is a demand for New York exchange. At such a time western banks may sell drafts until their New York balances are exhausted. They must then ship currency to New York if they wish to maintain their balances so as to be able to continue selling drafts.

From July to October the tables are turned. Westerners are selling the rest of the country more than they are buying. Banks in the West have more New York drafts offered to them than they are called upon to sell. Consequently, they pile up balances in New York. At the same time, they have rather heavy demands from depositors for cash to satisfy the needs for circulation. They may, accordingly, call upon New York to send them cash. There is no reason for leaving surplus funds in New York unless they can be loaned there at higher rates than they will command in the West. The usual practice in the autumn months is to call for cash.

Any particular bank, therefore, sometimes has occasion to purchase more New York exchange than it needs to sell, or it has a demand for more than it buys or receives on deposit from its customers. Unless the country bank wishes to shift its balance from a New York bank to some other bank, it will be necessary to make a shipment of currency when its balance piles up. When its balance is large enough,

it will accept deposits of drafts on New York only with the intention of shipping back cash. When its New York balance is depleted, it will sell drafts with the knowledge that it must ship currency to New York to cover the amount

9. *Cost of New York exchange.*—The shipment of currency involves expense, and it is not likely that a bank will accept superfluous New York exchange unless it receives a fee which will cover the cost of collecting the draft in cash. Neither will it sell exchange when its New York balance is depleted and when the sale means that currency must be shipped, unless it receives a fee large enough to cover the cost of shipment. This cost depends upon three items: first, the express charge; second, insurance; and third, the loss of interest. The charge for transportation is usually combined with the charge for insurance by the express company. The moment the New York bank delivers the cash to the express company for shipment to the country bank upon its order, it ceases to pay interest on that sum. On the other hand, the country bank cannot loan against currency in transit to New York. The country bank loses interest and pays all charges on shipments both ways.

The cost of shipping gold between New York and some of the other centers is about as follows:

Chicago	$0.50 per thousand dollars
St. Louis	0.60 per thousand dollars
New Orleans	0.75 per thousand dollars
San Francisco	1.50 per thousand dollars

Assuming the cost of shipment between Denver and New York to be one dollar per $1,000, a Denver bank must receive at least $1,001 for a $1,000 draft, when the sale of that draft necessitates a shipment of gold to New York. On the other hand, it will pay not over $999 for a $1,000 draft when the purchase means that a superfluous balance will be built up in New York and that the draft must be collected by a shipment of gold from New York. On small amounts the fee may be more than one dollar each way; but the cost of New York exchange in Denver cannot vary far from within the limits of $999 and $1,001 because of competition between the banks. As soon as it goes beyond these limits, a profit can be made by shipping gold one way or the other, and it is almost certain that some bank will take advantage of the situation. If one bank lowers the exchange charge, others must follow suit or lose their customers, with some loss of good-will at the same time.

Banks do not hold off from making exchange charges until the sale or purchase of further drafts means an actual shipment of gold to or from New York. As soon as the demand for exchange begins to exceed the supply, i.e., as soon as a tendency to ship gold to New York appears, the exchange charge or price of exchange is raised. How far the price will rise depends upon the seriousness of the situation as viewed by the various banks. If one banker thinks the increase in demand is only temporary and that actual shipment will not be necessary, he will raise the

price only to a slight extent. Other banks must offer exchange at as low a price as he does, or they will lose business. The same principles apply when supply is outrunning demand. The price is then dropped below par, the exact amount of the drop being regulated by competition between the banks. As was shown above, the price or rate of exchange can in no case drop far below $999 or go far above $1,001.

It should be borne in mind that the ordinary quoted rates of exchange apply only to large amounts. The individual who goes to a bank with a small draft to sell may get a price below par when the quoted rate is par or even above. As a matter of fact, many banks always buy and sell exchange at par when dealing with their regular customers, especially their most important customers, unless the amount involved in a single transaction is large. The rate paid by an individual on a small draft may have little or no relation to the current movement of exchange.

It is the large concerns and the banks which buy and sell exchange at the quoted rates. They deal in large sums. A bank in Chicago may exhaust its balance in New York. If it is to sell more drafts it must build up its deposit. This is usually done in one of three ways: by shipping gold to New York; borrowing in New York and leaving the proceeds on deposit; or buying exchange from some other bank. The last method is generally preferred so long as exchange can be bought under $1,000.50 (fifty cents being the shipping cost). It is possible sometimes to buy at as

low a rate as $999.50. In Chicago and other important inland cities there are men, called exchange brokers, who do nothing but buy and sell New York exchange for the banks.

10. *Settlements thru the sub-treasuries.*—The cost of shipping currency from one city to the other is frequently saved to the banks by the Federal treasury. For a good many years payments between the treasury at Washington and the sub-treasuries in the various large cities were all made by cash shipments. It happened very frequently that, at the same time the treasury was forwarding considerable sums of cash between two cities, the banks would be shipping currency in the opposite direction. Early in the seventies an ingenious cashier in New Orleans suggested to Secretary of the Treasury McCullough that a saving both to the government and to the banks might be effected if the banks, when they wished to transmit money to a city in which a sub-treasury was located, would ascertain whether the government at the same time did not wish to send money in the opposite direction. If this proved to be the case, it would be profitable to the banks and to the government to allow the banks to deposit the money in the Teasury and receive an order upon the Treasury in the other city. The Treasury office in the first city would receive the currency it required from the depositing bank, and the bank in the other city would receive the currency from the Treasury instead of from its correspondent and all cost of transporting money would be eliminated.

11. *Equilibrium of demand and supply.*—The premium or discount on domestic exchange is published in the principal dailies and is useful to the business man as indicating the volume and direction of trade at any particular time. An unusually high or an unusually prolonged premium on New York exchange will indicate that the purchases of local merchants have been unusually heavy in that year, if there are no extraordinary transactions to affect the price of exchange.

Why does it not happen that under certain circumstances a community may buy more goods than it sells during any particular period and thus be forced to part with all its currency in settling the balance? Since each trader is simply looking out for his own private profit and does not concern himself with the question of the amount of currency, there seems to be no reason why a community might not be drained of its currency. This brings up the question of the balance of trade, the principles of which are the same whether the exchange of goods is between two separate nations or between two localities within the same nation.

Suppose for any reason that there should be an unusually heavy purchasing of goods by the merchants of a western state in any particular year. The merchants would buy from the banks New York exchange with which to pay their bills. The banks, after having exhausted their credits in New York, would be obliged to ship currency in order to

cover the drafts on New York sold to the merchants.

Despite this possibility, there is never any danger that a community will be stripped of its money or cash as a result of its purchases of goods from other communities. No matter how freely Chicago and the country tributary to it may purchase goods from the East, those purchases can never make any serious drain upon the cash supply of Chicago. No matter how extravagant the people of the West may be, their purchases of eastern goods can never be greatly in excess of their sales to eastern customers. Should the people of Chicago for extraordinary reasons at any time increase their purchases from New York and other eastern cities, the first effect in Chicago would be an increase in the demand for New York exchange and in bank shipments of currency from Chicago to New York. The loss of currency from Chicago, since it would reduce the lending power of Chicago banks, would tend to cause a rise in the rate of interest and a rise in the value of money. The prices of certain commodities would begin to decline; not of all commodities, but of those which are subject to speculation, such as stocks, wheat, corn and pork. Most of the speculators in these articles are borrowers, and the interest they pay is an important item in the expenses of their business, so that when the interest rate rises they are obliged to contract their operations. Chicago would thus become a good place to lend in and also a good place in which to buy stocks and bonds, wheat

and other speculative commodities. In other words, the value of money would rise in Chicago, and people in other parts of the country would increase their purchases in Chicago markets, remitting New York exchange in payment, and the price of goods would fall. The reader must not suppose that these changes in price or in the rate of interest need be so great as to attract general attention. Nevertheless, it cannot be doubted that such changes do take place, and that as a result the sales of Chicago to other parts of the country are so adjusted that in the long run they furnish a supply of New York exchange equal to the demand.

Thus, it happens thruout the country that in the course of a year the debts of every community are always practically balanced by its credits on account of sales, so that large shipments of currency are never necessary. Indeed, if our monetary and banking systems were perfect, shipments of currency from one part of the country to another would seldom occur as a necessary result of trade transactions. Money or currency would be shipped to a community only as a result of increasing need for it as a local medium of exchange or as a basis for the expansion of bank credits. In Canada, for example, on account of the elasticity of its bank-note circulation, seasonal variations in the demand for currency are easily provided for by the chartered banks and their branches.

12. *Exchange viewed as a commodity.*—The easiest way to understand exchange, whether domestic or for-

eign, is to look upon it as a commodity. Instead of thinking of the rate of exchange, think of the price of it. Remember that exchange on New York or on London means the right to money there. To ask, What is the rate of New York exchange in Chicago? is the same as to ask, How much must one pay in Chicago for the right to $1,000 in New York?

The rate or price of exchange, like the price of any commodity, is determined by the interaction of the demand for and the supply of exchange. To understand changes in the rate, it is necessary to understand the forces of demand and supply. Demand for New York exchange in Chicago originates whenever a business man in Chicago or its tributary communities buys goods elsewhere and seeks to remit by a draft on New York. Supply originates when a business man in one community sells goods elsewhere and receives New York drafts in payment. The demand, then, varies roughly with the purchases of goods in other communities; the supply, with the sales of goods to other communities. The rate or price of exchange tends to rise when the demand outruns the supply, and to fall when the supply outruns the demand. There are certain limits to the extreme fluctuations in the rate. It cannot go higher than par by an amount greater than the cost of shipping gold to New York, nor lower than par by an amount greater than the cost of shipping gold from New York. The upper and lower points may be called the gold shipment points; that is, the points where a wider swing in the

rate of exchange makes gold shipment profitable.

Viewed in this way, as a commodity, exchange is extremely simple. The same principles apply in foreign exchange, with a few complications due to the fact that payments are made across national boundary lines. In foreign payments, only gold can be used for settling balances. A simple problem in arithmetic arises because of the fact that the coinage units of different nations sometimes vary from one another in the amounts of pure gold which they contain. Then, certain arbitrary measures are employed often to influence international movements of gold. These are seldom resorted to in domestic exchange.

REVIEW

In what ways may payment be made for goods sold by a merchant in one city to a consumer in another? Why would payment by local check be a burden to the merchant? What would be the best method of payment?

Why is New York exchange considered a commodity, just like any other commodity which may be bought or sold?

Show by an illustration the course of a draft.

Upon what three items does the cost of shipping gold depend? Explain how the price of exchange is arranged. Why may the rate paid by an individual on a small draft bear little relation to the current movement of exchange?

What prevents a community from being stripped of its supply of money as a result of excess purchases?

CHAPTER II

FEDERAL RESERVE BANK CLEARINGS

1. *Collection of country checks.*—The round about methods by which banks in the United States collect out-of-town checks, that is, checks on banks in different communities, have been mentioned in the preceding chapter. Few people realize the deplorable waste in time, money and labor which exists under our collection system.

The writer knows of a typical example of what may happen. A young man drew a check on a bank in Newport, Tennessee, and deposited it with a bank in Ithaca, New York, asking the banker to notify him as soon as the funds became available, inasmuch as he was going to need some money within a few days. After about ten days of waiting with no report, he went to the bank to make inquiry. Nothing had been heard of the check. He could wait no longer, and wired for funds. Several days later, when he had almost forgotten the entire matter, he was asked to come down to the bank and talk over his draft. By tracing indorsements on the back of it, he found that it had been sent to Albany, from there to New York, thence to Nashville, then to Knoxville, and finally to the drawee bank in Newport. The Newport bank discovered that the draft

had been filled out incorrectly in the first place and that it could not be paid. Word was sent back around the circuit, all the bookkeeping entries were corrected, and the draft was finally returned to the Ithaca bank. Approximately five weeks elapsed in the meantime. Not over forty-eight hours is required for a letter to reach Newport from Ithaca. This is not an extreme case.

Because of the time, trouble and expense involved in collecting out of town checks, the use of checks on banks in one city for payments to creditors located in another city at a distance is looked upon with disfavor. The creditor who receives the check must either bear the cost of collection or load it on his bank, if he is able to do that.

Much of this difficulty could be eliminated if the United States had a branch banking system instead of the present system, which is composed of some 27,000 small, independent banks. If there were a hundred banks with fifteen thousand branches, the matter would be greatly simplified. Many checks would be redeposited in another branch of the drawee bank and no collection problem would be involved. Checks on different banks could be put thru centrally located clearing houses, as they are in Canada.

2. *Federal Reserve system.*—The United States does not have a system of branch banks. Their Federal Reserve system, however, is to a limited extent comparable to a branch system. There are twelve regional banks operating under the general supervision

and control of the Federal Reserve Board at Washington. Each of the reserve banks may be expected to establish branches in time.

Early in 1915, the Reserve Board announced a new plan for collecting checks within the various Federal Reserve districts. In a ruling, dated May 1, 1916, the original scheme was made much more comprehensive, and the extended system was put into actual operation on July 15, of that year.

3. *Federal Reserve clearing.*—The Federal Reserve Act of 1913 empowers the Reserve Board to require each Federal Reserve bank to "exercise the function of a clearing house for its member banks." Under this authority the Board requires each of the twelve reserve banks to receive at par from its member banks, checks drawn on all member banks whether in its own district or other districts, and also checks drawn on such non-member banks as agree to remit for their checks at par. Each reserve bank must also receive from other reserve banks, checks on all of its own member banks and upon non-member banks in its district whose checks it can collect at par.

Banks have been accustomed to make a charge for remitting cash in payment of checks drawn against them and presented thru the mails. The excuse for the charge is the cost and trouble of shipping currency. Country banks, particularly, make a considerable revenue out of exchange charges. This is to some of them what the farmer calls his "cash crop." It furnishes ready money in the business.

Member banks are not required to send in checks for clearing; they are permitted and encouraged to do so. They are required, however, to remit at par for any checks against them which the reserve bank may present thru the mails or otherwise. They bear none of the expense unless they send in checks to be cleared; when they do send in checks they are charged pro rata by the reserve bank according to the number of items (not the amounts) presented by them for clearing. The cost for the first three months ran from one to two cents per item.

Non-member banks are not permitted to clear. Checks against them are received at par and cleared only so long as they remit at par. They are almost compelled to remit at par when member banks are doing this, because of the loss of prestige suffered if their checks are not worth as much in other cities as are the checks of competitive member banks. Par lists of member banks and non-member banks, on which items are received, are published from time to time.

4. *When proceeds are available.*—Checks are credited at par immediately upon receipt, subject to final payment. The funds are not available for withdrawal or to be counted as a part of the minimum reserves with the reserve bank, however, until actually paid or until sufficient time for payment has elapsed. A schedule is published by each reserve bank showing the number of days required for collecting on various points in the country. For example,

the Federal Reserve Bank of Chicago issues a schedule containing four divisions:

1. Points on which checks are available at once.
2. Points on which checks are available in two days.
3. Points on which checks are available in four days.
4. Points on which checks are available in eight days.

A member is forbidden to allow its reserve on deposit with the reserve bank to fall below the legal limit, under penalty of a fine equal to two per cent above the ninety-day discount rate at the reserve bank.

It is proposed that all checks and drafts received shall be forwarded for collection as rapidly as possible. The saving from this direct routing should be considerable.

5. *Member banks maintain balances.*—There are four ways by which a member bank, say in Chicago, can build up its balance at the reserve bank.

1. Deposit Chicago exchange.
2. Deposit out-of-town items.
3. Ship currency to the reserve bank, at the expense of the reserve bank.
4. Rediscount, leaving proceeds on deposit for exchange purposes.

A non-member bank cannot remit for checks drawn on it except by sending cash. The cost of shipping cash is borne by the reserve bank.

The clearing plan places non-member banks at a decided disadvantage as compared to member banks. They are practically compelled to remit at par when called upon to do so, because of competition from

member banks. This deprives them of the income which they formerly received thru the practice of making a deduction when remitting. At the same time they do not have access to the inexpensive reserve clearing machinery. They cannot send in items to be cleared. Moreover, they cannot maintain balances with the reserve banks for exchange purposes, as can member banks. They are not permitted to keep any deposit with reserve banks or to rediscount, but must remit cash for each batch of checks presented for payment.

6. *Indorsement and presentation of items.*—Members' banks are instructed to indorse without restriction all items forwarded to the reserve banks for clearing. This makes the member banks liable on all items cleared. The reserve banks merely act as agents of the banks and do not assume any liability other than ordinary care and promptness in presenting items for collection.

Checks on member banks within the district are forwarded directly to them. Checks on non-member banks are forwarded thru collection agents, presumably member banks. Checks on banks in another district may be sent to the reserve bank of that district.

Under the old clearing system, doubt was raised from time to time as to the legality of presenting thru the mail a check to the bank on which it is drawn. In a few states the courts have held that this procedure was improper, and that banks so doing were guilty of

negligence. It is pointed out that the holder of a note would not think of mailing it to the drawer for collection, inasmuch as the drawer might tear up the note and thus destroy all evidence of his indebtedness. From analogy it is reasoned that a check should be presented, not directly thru the mail to the drawee bank, but indirectly thru another bank in the same town. The analogy is a poor one. The destruction of a check does not alter the amount of the bank's liability; the deposit still remains. What difference does it make whether the amount is paid to the depositor, who draws the check, or to the payee, who holds it? The collecting bank should be held only to a prompt and actual presentation of the check. This presentation can be made by sending the check thru the mail as well as in any other way.

7. *Charges for collection.*—It was stated in Section 3 that the service charge made by reserve banks to member banks during the first three months of operation ran from one to two cents per item. In addition, the bookkeeping of member banks has been materially simplified. It is to be expected that member banks would lower their exchange charges to customers. In fact, the Federal Reserve Board is empowered by law to fix, not only the service charge to be made by reserve banks, but also the exchange charge made by member banks. There is a provision that the member banks must not be forced to carry on the collecting business at a loss. Presumably the charges will be fixed ultimately at a figure just about

equal to the cost involved, with perhaps a small margin of profit.

Many banks have voluntarily lowered the charges. In the larger cities, it is customary for the clearing house banks to agree upon uniform rates. Some of the clearing houses have already reduced the rates to be charged by their members without waiting for action by the Reserve Board.

8. *Rates of New York Clearing House banks.*— The new ruling of the New York Clearing House Association may be cited as an example. This went into effect on January 1, 1917. Under the old ruling, items on certain points were made discretionary, that is, the banks were permitted to charge any or no rate as they chose. In practice, they made no charge. Items on certain other points were charged for at the rate of not less than one-tenth of one per cent; and on others, farther away, not less than one-fourth of one per cent. If any charge was made, it could not be less than ten cents. The ten-cent rule is abolished.

The new ruling contains about the same list of discretionary points, except that Boston, Providence, Albany, Troy, Bayonne, Newark, Philadelphia and Baltimore are omitted. These cities are covered in a new ruling which is quoted below. The old list of points, items on which are charged at rates of not less than one-tenth and one-fourth of one per cent respectively, is kept the same. Many items on these points, perhaps a majority of them, soon will be covered in the following new ruling:

Sec. 3. For all items (whether such items are collected thru the Federal Reserve Bank of New York or otherwise) which the Federal Reserve Bank of New York shall have notified the Manager of the New York Clearing House Association it will receive from its members, the collecting banks shall charge as follows:

(a) For all items available one day after receipt —pursuant to said notification—discretionary with the collecting bank.

(b) For all items available two days after receipt —pursuant to said notification—not less than one-fortieth of one per cent ($\frac{1}{40}$ of 1 %) of the amount of the items. (Except as to items referred to in Secs. 4 and 5.)

(c) For all items available four days after receipt—pursuant to said notification—not less than one-twentieth of one per cent ($\frac{1}{20}$ of 1%) of the amount of the items.

(d) For all items available eight days after receipt—pursuant to said notification—not less than one-tenth of one per cent ($\frac{1}{10}$ of 1%) of the amount of the items.

Eight days is sufficient time to allow for collection on any part of the country. It appears, then, that the new ruling applies to checks drawn on all member banks and on all par-remitting non-member banks, wherever located, the old ruling applies only to non-member banks which do not remit at par. Even a cursory examination reveals an enormous drop in exchange charges.

9. *An illustration.*—Reverting to the grape fruit transaction described in the preceding chapter, let us suppose that Jones sends his check on a Denver bank

to Swann in Tampa. If the Denver bank is a member of the Federal Reserve system or if it is a nonmember bank which has agreed to remit at par to the reserve bank of its district, the check will be received by the Federal Reserve Bank of Atlanta at par. Swann may deposit it with his Tampa bank, which will then send it for clearing to the reserve bank if it wishes. The service charge to the bank will be probably one and one-half cents; the exchange charge to Swann more than that by an amount sufficient to pay bookkeeping expenses, etc. The cost of currency shipment does not enter into the extra exchange above the service charge, inasmuch as this is borne by the reserve bank and is presumably included in the service charge.

Suppose the check gets to the reserve bank. It is credited to the account of the Tampa bank, but is not available for withdrawal or as reserve until sufficient time has elapsed for collecting it in Denver. The check is immediately sent to the Federal Reserve Bank of Kansas City. There it is credited to the Atlanta reserve bank, debited to the Denver bank, and forwarded for collection—either to the Denver bank directly or to it indirectly thru some other bank in the vicinity, which has been designated by the Kansas City Reserve Bank as a collection agent. Within possibly four days, certainly not over eight days, the whole transaction is settled. As compared to the old collection system, there is a great saving in time, labor and expense.

10. *Advantages and disadvantages.*—The advantages of the Federal Reserve clearing system may be summarized as follows:

1. Checks are presented promptly and directly to the drawing bank.
2. The custom which drawee banks had of deducting a certain amount from the face of a check when remitting to collecting banks will be gradually discontinued. All member banks now remit at par; non-member banks will be forced to do so by competition of member banks.
3. The collection charge will be reduced to approximately what it costs the bank to collect.
4. Country banks will no longer need to maintain such large balances in the financial centers in exchange for the privilege of having miscellaneous out-of-town items received at par for collection. City banks, instead of making a charge for each item collected, have been accustomed to require country banks to maintain balances with them as compensation for collection service.

There are two important objections to the new plan:

(a) Small banks will lose the revenue which they formerly derived from the practice of deducting a certain amount when remitting for checks on themselves. This is a serious matter to some of the banks.

(b) City banks will find their relations with correspondent banks thruout the country weakened and, in some cases, broken off altogether. The collection service will be rendered to an increasing extent by the reserve banks. Accounts will still be kept with New York banks and, to a lesser degree, with banks in other

financial centers, against which the depositing banks will draw exchange. New York exchange will continue to be an important form of remittance between business men all over the country; but its use will become less and less necessary as the machinery employed for collecting checks from the country banks is improved.

Aside from the mere loss of profit to both correspondents, there are other reasons for regret in the breaking up or the weakening of these relationships between banks in various parts of the country. Correspondents kept each other informed about business conditions in their respective communities. In the United States the criticism has been very frequently heard that most of our bankers are merely local money lenders and that they do not have adequate information about business conditions thruout the country. The breaking up of collection arrargements will make them all the more provincial. This consideration is not sufficient, however, to outweigh the advantages of cheapness and convenience which will be gained from the new plan. Some other way must be found for informing our bankers about nation-wide business conditions. The best means of doing this would be the establishment of a branch banking system.

11. *Success of the system.*—The new clearing system grew rapidly from the very beginning. The following figures give a comparison between the business done the first month with that done during the fourth:

OPERATIONS OF THE FEDERAL RESERVE CLEARING SYSTEM, APRIL 16 TO MAY 15, 1919

Bank	Average number of items handled daily	Average amount of daily clearing	Member banks in the District	Non-member banks from which checks are collected at par
Boston	104,510	$33,436,849	426	243
New York	142,647	115,551,522	729	319
Philadelphia	90,282	31,648,881	666	356
Cleveland	77,015	28,591,769	822	794
Richmond	52,673	19,257,124	570	299
Atlanta	32,503	9,360,802	424	277
Chicago	85,280	34,783,000	1,346	2,925
St. Louis	46,477	15,650,318	521	1,356
Minneapolis	31,395	11,082,870	875	1,293
Kansas City	68,629	19,940,644	1,003	2,248
Dallas	25,965	10,436,066	741	240
San Francisco	37,643	10,065,030	665	911
Total Apr. 16 to May 15, 1919	795,019	$339,804,875	8,788	11,261
July 15 to Aug. 15, 1914	133,113	59,301,696	7,624	7,032

12. *Gold Settlement Fund.*—The Federal Reserve Board has exercised its power to provide a clearing house for the twelve reserve banks. The Gold Settlement Fund has been established at Washington. Each of the reserve banks is required to maintain a balance there of at least $1,000,000 in gold or gold certificates. At the close of business every Wednesday, or Tuesday if Wednesday is a holiday, each reserve bank telegraphs to Washington the amounts of its indebtedness to each of the other reserve banks. By the simplest bookkeeping operation these amounts

are offset and the proper balances transferred on the accounts of the Gold Fund.

At the settlement of November 16, 1916, over $200,000,000 was cleared for the reserve banks with balances aggregating only $11,755,000. Even the balances were not shipped; they were merely transferred on the books of the Fund. After settlement on that day, there was nearly $140,000,000 in the Fund. It is apparent that the operation of this plan results in an enormous saving thru reducing the amounts of gold shipped from one part of the country to another.

REVIEW

How could the country check evil be eliminated?

Describe the Federal Reserve plan for collecting checks.

How can a member bank build up its balance at a reserve bank, and why are non-member banks placed at a disadvantage in doing so?

What advantages are gained thru member banks indorsing without restriction all items which are forwarded to reserve banks for clearing? What was the practice under the old clearing system?

What are the advantages and disadvantages of the Federal Reserve clearing system?

What is the Gold Settlement Fund and how is it operated?

CHAPTER III

GENERAL ASPECTS OF FOREIGN EXCHANGE

1. *Definition of foreign exchange.*—Foreign exchange may be defined as the system by which two or more countries discharge their debts and adjust their financial and commercial transactions with each other. Payment is effected by inter-cancelation of indebtedness by means of bills of exchange and other credit instruments, the difference or "boot" only being adjusted from time to time by the shipment of gold or its equivalent. The foreign exchanges, therefore, operate as a clearing house between nations and, just as the banks offset their debts against one another and settle the final difference in gold, so nations offset their debts against one another and in the final analysis settle the difference by shipping gold. It must not be overlooked, however, in studying international exchange that there are no definite settlement days for the adjusting of all transactions to date. The adjustment of international balances is a continuous process and, under normal conditions, hardly noticeable to the keenest observer, except at certain seasons of the year or when it serves as a corrective to some large and unexpected transaction.

2. *How indebtedness between two countries arises.*

—The mutual indebtedness of two countries arises from a combination of the following:

Exports of merchandise
Investments abroad
The purchase of foreign securities
Payments of interest and dividends to foreign shareholders
Charges for transportation, insurance and commission paid to foreign corporations
Tourists' expenditures, etc.

There are, of course, many other causes which affect the course of the exchanges, but the above are the principal factors in the fluctations. Sometimes the balance of payment, as it is called, is with one country, sometimes with another, and the rate of exchange will accordingly rise and fall within certain well-defined limits, determined by the cost of shipping gold between the two countries. The rate of exchange may be defined as the price of the money of one country reckoned in the money of any other country.

The principal operations of foreign exchange include the issue of drafts and various forms of commercial paper, money orders, letters of credit payable abroad, cable transactions and the purchase and shipment of bullion and of foreign coin.

3. *Similarity between inland and foreign exchange.* —We endeavored in Chapter I to establish in the mind of the reader that the basic principles governing inland and foreign exchange are the same, the operation of both being based on the weight and fine-

ness of the gold contained in the monetary unit or units of the country or countries involved.

The same machinery is used in both foreign and inland exchange but in different degrees. In inland exchange, the transfer of funds is effected almost entirely by checks, bank drafts and shipments of currency; very little gold is moved. Bills of exchange, tho extensively used, are comparatively small in amount and scattered in destination, and are, therefore, not an important factor in inland exchange. In foreign exchange the transfer of funds between two countries is effected chiefly thru the medium of bills of exchange and the shipment of gold. Few checks, aside from sight bills of exchange drawn by banks, are used. Currency, being redeemable in gold only in the country where it is used, is of course not acceptable for remittance abroad.

4. *Expense of shipping gold.*—An important factor to consider in all exchange operations is the expense of transferring gold from one place to another. This expense includes carriage, risk and interest while the amount is in transit. The very general use of checks and bills of exchange in transferring funds has caused this factor of expense to be more or less lost sight of, except when conditions call for the actual shipment of currency or gold. It is, however, latent in every exchange transaction, foreign and domestic.

In the foreign exchange operation, these transportation charges are proportionately larger than in in-

land exchange because greater distances are involved. They are more or less concealed by the fact that the two sides of a transaction are in terms of different currencies, and are usually modified or even offset by the competition of bills of exchange, the supply and demand of which govern the proportion of such charges which a remitter is called upon to bear.

In inland exchange these charges are rendered more apparent by being expressed in the form of a commission or premium. They are also more uniform and stable and, being governed by the conditions of the banking system of the country, they tend to diminish as the system improves and better facilities obtain.

5. *Training in foreign exchange.*—One of the most essential features of a training in foreign exchange is a thoro knowledge of values and methods of conversion of the currency of different countries. All calculations by a beginner should be made independent of exchange tables. In many offices, the first calculation is made by one clerk, and checked by means of exchange tables by a second clerk. The training thus obtained and the facility and rapidity with which such calculations can be made, form the groundwork of a technical education in foreign exchange, which is daily becoming more valuable as international transactions increase.

In this connection, there are four things to be carefully studied. When these are mastered, foreign exchange will be robbed of most of its apparent intricacy:

1. Mint par
2. Gold or specie points
3. Rates of exchange and the reason of their fluctuations
4. Conversion.

6. *Mint par of exchange.*—The mint par between any two countries is the value of the monetary unit of one country expressed in terms of the monetary unit of another country using the same metal as a standard of value, tho the degree of fineness of the metal need not be the same. All coins, whether of gold or silver, are made of so much pure metal and so much alloy; the latter is used to harden the coins, thus reducing abrasion to a minimum. The term "fineness" expresses the number of parts of pure gold or pure silver contained in a thousand parts of the combination. The British sovereign is 916⅔ parts fine, or 11 parts fine gold and one part alloy. The gold coins of Turkey and Brazil are also 916⅔ fine. Those of

Country	Name of Unit	Gross Weight Grains	Pure Gold Grains of	Dollar Equivalent	Sterling Equivalent in pence
Austria-Hungary	*kronen*	5.22776	4.70498	.20262	.10d
Latin Union	franc	4.97817	4.48036	.19295	9.516
Canada and United States	dollar	25.8	23.22	1.	49.316
Denmark	*kronor*	6.91415	6.22274	.26799	13.212
Germany	*reichsmark*	6.14588	5.53134	.23821	11.75
Holland	*gulden*	10.37054	9.33348	.40195	19.82
Japan	*yen*	12.86024	11.57422	.49505	24.576
Mexico	*peso*	12.86023	11.57421	.49845	24.57
Russia	*rubles*	13.27584	11.94826	.51456	25.37
Great Britain	pound	123.27447	113.00160	4.86656 or 4.86⅔	.....

TABLE OF GOLD CONTENTS AND EQUIVALENT VALUES OF THE MONETARY UNITS OF THE PRINCIPAL GOLD STANDARD AND GOLD EXCHANGE STANDARD COUNTRIES.

Country:	Unit:	Value of $1:	Fineness:	Value in Dollars.	Value in Pence:	Grammes		Remarks:
						Standard:	Fine:	
Egypt	£E	£E 0.2023	875	$4.9429	243.733	8.500	7.4375	
Turkey	£T	£T 0.2273	916⅔	4.3966	216.8	7.2164	6.615	
Great Britain	Sovereign	4.9316d	916⅔	4.86656	240.	7.988055	7.32238	113 1/673 grains
Portugal	Escudo	E .9255	900	1.0805	53.284	1.80634	1.62571	
Uruguay	Peso	P .9669	917	1.0342	51.003	1.69717	1.55615	No gold coins minted
Newfoundland	Dollar	$ .9863	916⅔	1.0139	50.	1.66420	1.52551	
United States	Dollar	$ 1.	900	1.	49.316	1.671813	1.50463	23.22 grains
Argentina	Peso	P 1.0365	900	.96476	47.58	1.6129	1.45161	45/31 grammes
Brazil	Milreis	1$831	917	.54616	26.935	.89648	.82207	No gold coins minted
Brazil (paper)	Milreis	3$0822	916⅔	.32444	16.	.532537	.48816	1/15 of £1
Russia	Rouble	R 1.9434	900	.51457	25.371	.86026	.774234	
Japan	Yen	Y 2.0062	900	.49846	24.582	.83333	.750	
Netherlands, The	Florin or Guilder	fl 2.4878	900	.40196	19.823	.672	.6048	
Costa Rica	Colon	C 2.1489	900	.46535	22.951	.77801	.7002	No gold coins minted
India	Rupee	R 3.1.1	916⅔	.32444	16.	.532537	.48816	1/15 of £1
Scandinavian Union	Krone	Kr 3.7315	900	.26799	13.216	.448023	.4032258	25/62 grammes
Germany	Mark	M 4.1979	900	.23821	11.748	.398248	.358423	100/279 grammes
Austria-Hungary	Krone	Kr 4.9352	900	.20263	9.993	.3387534	.304878	25/82 grammes
Latin Union	Franc	Frs 5.18262	900	.19295	9.516	.3225806	.2903226	9/31 grammes

STATEMENT OF EQUIVALENT VALUES OF THE MONETARY UNITS OF VARIOUS COUNTRIES.

Country	Great Britain		North America	Holland	Scandinavian Union	Germany	Austria-Hungary	Latin Union
	Pounds	Pence	Dollars	Florins	Crowns	Marks	Crowns	Francs
Great Britain — £1. Stg.	1.	240.	4.866,563	12.107,110	18.159,515	20.429,46	24.017,426	25.221,54
Portugal — Escudo	.222,019	53.284,58	1.080,470	2.688,010	4.031,761	4.535,733	5.332,321	5.599,670
Uruguay — Peso	.212,518	51.004,38	1.034,283	2.572,990	3.858,223	4.341,631	5.104,140	5.360,039
North America — Dollar	.205,484	49.316,11	1.	2.487,816	3.731,485	4.197,922	4.935,192	5.182,621
Argentina — Peso	.198,243	47.578,34	.964,762	2.400,152	3.600,000	4.050,000	4.761,288	5.000,000
Brazil — Milreis	.112,228	26.934,77	.546,166	1.358,760	2.038,010	2.292,762	2.695,433	2.830,571
Russia — Rouble	.105,735	25.371,24	.514,567	1.280,148	1.918,100	2.160,113	2.539,488	2.666,806
Japan — Yen	.102,426	24.582,17	.498,461	1.240,079	1.860,000	2.092,500	2.460,000	2.583,333
Holland — Florin	.082,596	19.823,04	.401,960	1.	1.499,904	1.687,392	1.983,744	2.083,200
Chili — Peso	.075	18.	.364,992	.908,033	1.361,963	1.532,206	1.801,306	1.891,616
India (Br.) — Rupee	.066,666	16.	.324,438	.807,141	1.210,634	1.361,963	1.001,161	1.081,436
Scandinavian Union — Crown	.055,068	13.216,22	.267,990	.666,709	1.	1.125,000	1.322,581	1.388,889
Germany — Mark	.048,949	11 747,736	.238,213	.592,630	.888,889	1.	1.175,627	1.234,568
Austria-Hung'y — Crown	.041,636	9.992,76	.202,626	.504,097	.756,097	.850,610	1.	1.050,136
Latin Union — Franc	.039,649	9.515,69	.192,953	.480,030	.720,000	.810,000	.952,258	1.

Calculations based on 15.432,35 grains to the gramme.

nearly all other countries are on a basis of 900 fine, or 9/10 fine gold and 1/10 alloy.

The folder opposite page 36 gives a list of the principal gold standard countries with the names, weights in grammes and values of their various units.

7. *Computing the mint par.*—The mint par is arrived at by dividing the number of grains or grammes of fine gold in the one coin into the number contained in the other. For instance, compare the sovereign, the unit of Great Britain, and the gold dollar, the unit of the United States:

Gross weight of sovereign	123.27447	grs.
Less $\frac{1}{12}$ alloy	10.27287	grs.
Fine gold in sovereign	113.00160	grs.
Gross weight of dollar	25.8	grs.
Less $\frac{1}{10}$ alloy	2.58	grs.
Fine gold in dollar	23.22	grs.

therefore,

$$1 \text{ dollar} = \frac{23.22}{113.0016} = £.205484 = 49.316 \text{ pence}$$

$$1 \text{ sovereign} = \frac{113.0016}{23.22} = \$4.86656$$

Similarly, a franc contains .2903225 grammes of fine gold, while the dollar contains 1.50463 grammes. Hence,

$$1 \text{ dollar} = \frac{1.50463}{.2903225} = 5.18262 \text{ fcs.}$$

$$1 \text{ franc} = \frac{.2903225}{1.50463} = 19.2953 \text{ cents}$$

79525

The mint par between any two countries can be arrived at in the same way. The mint par between two countries that use the same metal as a standard is constant. It varies only when one of them alters its coinage regulations by increasing or decreasing the quantity of pure metal in its monetary unit.

Between a gold standard country and a silver standard country there can exist no fixed par of exchange, since the value of silver in relation to gold is subject to great fluctuation.

8. *Par of exchange.*—The mint par is the pivotal point of the rates of exchange between two countries. In other words, it is also the ratio at which the standard coin of the country will be exchanged for that of another. Theoretically, a sovereign is worth par in New York ($4.86656), but practically this ratio holds good only for large amounts. If a traveler wants to change ten sovereigns in New York he would probably receive only $48.50 or $48.60 for them instead of $48.66⅔, the difference being retained by the bank as payment for its services and to cover the interest on the amount until it had collected sufficient sovereigns, say, one thousand, to warrant the trouble of taking them to the United States mint where they would be exchanged for $4,866.56, less a small melting charge. If the ten sovereigns are in London the traveler will realize on them by selling to a New York bank the "right," in the form of a check or order, to draw these ten sovereigns in London, and the banker would repay him according to the current rate of ex-

change. If there is an active demand for sterling exchange he will get a good price for his check on London, say, $48.75 (over par). If, on the other hand, there is little or no demand for sterling exchange and the supply of checks and bills of exchange is plentiful he will get a low price, say, $48.50 (below par).

9. *Gold points.*—Foreign exchange, thru the medium of bills of exchange and other credit instruments, enables countries to regulate their mutual indebtedness without the transfer of coin or bullion. A bill of exchange is a commodity like wheat and cotton, and, as such, it is subject to the law of supply and demand. If the purchase rate of exchange reaches the point at which it is cheaper to remit gold than to pay the rate demanded for transfer by draft, gold exports usually result. The rates of exchange, produced by buying gold in one country and shipping it to another, are called the *gold or specie points.* The mint or theoretical par remains invariable among gold standard countries. If the exporting and importing of gold could be effected without expense or loss of interest, the mint par and gold points between any two countries would be practically identical, but heavy expenses for freight, insurance, cooperage, cartage, abrasion, interest while in transit and other charges are involved in a gold shipment. These expenses deducted from the mint par give the "import gold point" and added to the mint par give the "export gold point"; that is to say, when it costs more to buy sterling exchange in New York than it would cost

to buy gold to the same amount and ship it to London, the remitter naturally takes the cheaper method and exports gold. On the other hand, when bills of exchange are so freely offered in New York that the rate becomes abnormally low, a seller may find it cheaper to transfer his London balance by importing the gold.

Under normal conditions, the cost of shipping sovereigns between London and New York is about two cents per sovereign, and the mint par of the pound sterling is $4.86⅔. Therefore, when a lower price than $4.34½ is offered for a bill of exchange it is cheaper to import the gold from England, and when a higher price than $4.88½ is asked, it is cheaper to send gold to England.

10. *Significance of gold movements.*—The export of gold from New York to London implies:

1. That New York owes London (exchange is favorable to London and unfavorable to New York).

2. That bills of exchange on London have been eagerly sought for in New York in order to liquidate this indebtedness.

3. That the premium demanded by sellers in the form of a higher exchange rate exceeds two cents per pound sterling and therefore it has become cheaper to buy gold in New York and export it to London.

Conversely, the import of gold to New York from London implies:

1. That London owes New York (exchange is favorable to New York and unfavorable to London).

2. That bills of exchange on London have been of-

fered freely in New York to absorb this balance.

3. That the discount demanded by buyers in the form of a lower exchange rate exceeds two cents per pound sterling and therefore it has become cheaper to buy gold in London and import it to New York.

11. *Actual gold points.*—The extreme range of the gold points between New York and London, and the continental centers is approximately as follows:

	Imports	Par	Exports
New York and London.....	$ 4.84½	$ 4.86⅔	$4.88½ per £1.
New York and Paris.....	5.23	5.18⅛	5.16 fcs per $1.
New York and Berlin.....	94.50	.95⅛	96.25 cents per 4 marks
London and Paris.....	25.32½	25.22	25.12½ fcs per £1.
London and Berlin.....	20.53	20.43	20.34 mks per £1.
London and Amsterdam....	12.15	12.10	12.04 florins per £1.

12. *War and foreign exchange.*—Under normal conditions, margins between the two shipping points are thus sufficiently large to allow considerable play to the numerous factors affecting international finance and trade, and the rates fluctuate more or less regularly between the two points. Wars and rumors of wars, and other startling political events frequently disturb the delicate working of the exchanges and cause the rates to go beyond normal limits. For instance, in the first week of August, 1914, demand sterling was quoted in New York at $6 and cables at $7 per £. It soon declined from these figures, however, and continued dropping until the middle of February, 1915, when "demand" was quoted $4.79, and on September 1, 1915, at $4.50,[1] gradually re-

[1] In 1873, sterling drafts sold at 4.62⅝, while during the panic of 1857 sixty-day bills sold at 25% discount (on the old par of exchange, $4.44⅘), or $3.33 per £1.

covering until it reached $4.76½ in January, 1916, at about which point it was maintained during the year 1916.

During a serious war, therefore, the courses of exchange are no longer restricted by the "gold points," but fluctuate widely, and at times wildly. Among the new factors which then affect the exchanges are the following: the international money markets are demoralized; sentimental, if not legal, restrictions are placed on the export of gold by every country; and insurance, if obtainable at all is at a prohibitive rate, because of the risk attending transportation.

13. *The clearing features of foreign exchange.*— Exporters and importers of foreign goods who have foreign bills to sell and buy, respectively, occasionally transact business directly with each other, but as a general rule it is much more convenient and economical to pay a small commission to a bank for its services and obtain a remittance for the exact amount and tenor required.

A bank is able to sell a bill of exchange on London for any required amount because it is also a purchaser of bills of exchange on London and other foreign centers; in other words, it acts as a middleman between those customers who have debts to pay and those to whom debts are owing in London and thus it is able to offset sales against purchases. If a bank's sales of London exchange exceed its purchases, it goes into the exchange market and buys London funds from other banks and vice versa. In this way the supply

and demand are constantly being brought together, first thru the needs of customers of the same bank, and secondly by transactions between the banks themselves, principally thru the New York exchange market which acts as a foreign exchange clearing house for the whole continent, and which can be relied upon, under ordinary circumstances, to absorb an almost unlimited amount of foreign exchange.

14. *Buying and selling exchange.*—It is difficult for the mind to grasp the process by which the multitudinous transactions in foreign exchange, occurring daily in thousands of banks in the United States and Canada, continuously, and apparently automatically, adjust the rate of exchange on the basis of supply and demand. New York is the recognized foreign exchange market of the continent, and banks thruout the country having exchange to sell or buy do so thru their New York correspondents. The exchange requirements of the country are therefore concentrated in New York. Some New York banks will have exchange to sell, others orders to buy, and the scarcity or abundance of the bills of exchange on any country is promptly disclosed by competition, and the rates adjust themselves accordingly. Foreign exchange brokers, as they are called, act as intermediaries between buyers and sellers in New York. As the factors which regulate the supply and demand are constantly changing, the brokers must keep in close touch with the market and with their clients. They call daily, sometimes hourly, on the leading bank-

ers and exchange houses to inquire if they are buyers or sellers, and at what price. A broker not only brings buyers and sellers together, but obtains in so doing an approximate knowledge of the general supply and demand for bills and can advise his clients accordingly. The usual commission to a broker is about $5 per £10,000 on sterling exchange and 1/64 of one per cent on continental exchanges.

15. *New York demand for sterling exchange.*— London's operations in New York exchange are factors that have to be taken into consideration, tho the transactions are comparatively small compared with those originating on this side. Since the exchange rate is, as a rule, fixed by the country which draws and negotiates the most bills, London necessarily adjusts its rate to that fixed by New York. The reason for this preponderance of American transactions is that the American exporter, rather than await a remittance from London, prefers to sell his bill and obtain ready money by drawing on his customer; American banks buy these bills readily as they can discount them in the London market. The American importer, likewise, who has bought goods abroad would rather remit for them to the foreign exporter than allow the latter to draw against him. In the former case he can obtain as low a rate as possible from his own bank, while in the latter he would have to pay a rate fixed by a strange bank or broker who would not have the same interest in the transaction.

REVIEW

What are some of the causes of indebtedness between countries? What is the rate of exchange?

What is essential in training persons in foreign exchange business?

How is the mint par arrived at? When is it constant, and when does it vary?

What are gold points?

What does it imply when gold is exported from New York to London? When it is imported to New York from London?

What effect has war on foreign exchange?

CHAPTER IV

RATES OF EXCHANGE

1. *Bills of exchange and their relation to gold.*— The strength and usefulness of credit rest entirely on the fact that the holder of a bill of exchange or other evidence of indebtedness has every confidence that the instrument will be absolutely and unquestionably redeemed in gold or its equivalent at maturity.

The payment of a debt, therefore, in another part of the same country, or to a foreign country by means of a check or bill of exchange, theoretically involves the payment of so many grammes or grains of gold. If Brown in Toronto owes Smith in Winnipeg he pays $100.25 to his bank in Toronto in order that Smith may receive $100 in gold or its equivalent in Winnipeg. As a matter of interest, we will work out the transaction in terms of gold (the dollar contains 23.22 grains of fine gold). For the bank draft of $100 Brown pays his bank 2,327.805 grains of fine gold (2,322 grains + $\frac{23.22}{4}$ grains commission) in order that Smith may receive 2,322 grains of fine gold in Winnipeg. Now, if we divide 2,322 grains and 2,327.805 grains by 23.22 (the amount of fine gold in the dollar), we get our original $100 and $100.25. Brown could have sent the amount to Smith himself in cash in the form of either gold or currency (govern-

ment and bank notes redeemable in gold on demand) but he would have had to pay as much or more than the 25 cents commission for express charges.

2. *Cost of sterling exchange.*—Similarly in sterling exchange, if a draft on London costs, for instance, one cent per pound over the par of $4.86⅔, Brown would pay $4.87⅔ per pound sterling for a draft on London, or worked out in grains of gold, add one cent's worth of gold or .2322 grain to 113.0016 grains (the weight of fine gold in the sovereign) and we get 113.2338 grains, which divided by 23.22 gives $4.876656 per sovereign or one cent over par.

If sterling exchange is low, say, $4.85 per sovereign or about 1.656 cents lower than par, a draft on London for £1,000 would cost Brown $4.850; in other words, in order that Brown's creditor may receive 113,001.605 grains of fine gold in London he has to pay only 112,617.08 grains to his banker for the draft, the difference 384.525 grains or .38452 grain per pound sterling is the equivalent in grains of 1.656 cent (.2322 × 1.656 = .38452 grain).

With sterling as low as $4.85, Brown would not think of shipping the gold himself, but, if he were asked $4.88⅔ per pound, it would pay him to do it as the shipping charges would be less than two cents per pound. What form would the shipment take? It can only be fine gold 113,001.605 grains in weight in the form of bullion, or sovereigns (1,000 of them), or eagles to the value of $4,866.56 weighing 123,274.47 grains (113,001.605 grains of fine gold). Brown

could not send currency, as he could in the case of Winnipeg, as bank and government notes, tho redeemable in gold in Canada, are not so in foreign countries. It is an important difference between foreign and inland exchange that apart from checks and bills of exchange, gold is the only medium of settlement between two countries, whereas within a country itself any form of currency that circulates freely may be remitted.

3. *Rates of exchange.*—Bills of exchange are a commodity and as such are bought and sold, and like other commodities are subject to the law of supply and demand. The reader should, for the present, dismiss from his mind the thought that he is dealing in the money of foreign countries and should regard bills of exchange and other credit instruments, used in transferring funds, as representing a definite kind of commodity—evidences of indebtedness.

The rate of exchange is the price per foreign unit at which the right to collect these debts is sold and does not refer, except indirectly, to the value of the gold monetary unit. A sovereign is always worth par in New York and the gold eagle always worth par in London. When sterling is quoted at, say, $4.85 in New York it does not mean that the sovereign has depreciated 1⅔ cents below par; it means that the "right" to obtain a sovereign in London is worth only $4.85 in New York. In this case the supply of these "rights" is ample and the demand small, hence the price falls.

4. *What makes the rate.*—The rates of exchange quoted between any two countries, therefore, are the prices for checks and bills of exchange. These are the mediums by which debts are transferred from one party to another.

The rate of exchange charged by a bank or broker for a foreign bill of exchange includes:

1. The mint par or price equivalent of the foreign coin.
2. Plus or minus a premium or discount on the mint par (greater or less conversely to the supply of bills on the market as compared with the demand for them).
3. Plus a premium or commission which the banker demands for his trouble and for the economy and superior convenience of a draft as compared with a remittance in coin or bullion.
4. Less an allowance for interest, according to the distance between the two points, and the tenor of the draft.
5. Plus the cost of shipping gold.

The rate of exchange paid by a bank or broker for a foreign bill of exchange includes:

1. The mint par.
2. Plus or minus a premium or discount on the mint par.
3. Less a commission covering the dealer's profit and an allowance for his risk and trouble.
4. Less a discount, according to the tenor of the draft.
5. Minus the cost of shipping gold.

The mint par never varies. It is a constant factor in any exchange rate. The most frequent variations in the rates are found in the premium or discount on the mint par, the range of which is governed by the law of supply and demand, and reflects the rela-

tive position of two countries as regards indebtedness. The allowance for interest or discount generally tends to vary with the foreign interest rate, tho sometimes in large transactions the domestic interest rate becomes a factor also, in connection with the financial operations necessary to complete them. The cost of shipping gold is modified and at times offset by the mutations in the other factors.

5. *Coinage ratio.*—The rate of exchange, therefore, must not be confused with the ratio at which one country will exchange its money for the standard coins of another country. If a man has one thousand sovereigns in New York he will receive par for them, or $4,866.56 [1] irrespective of the rate of exchange.

6. *Fluctuation in the rate of exchange.*—The intermediate rates between the gold points and the mint par, that is, the rates at which business is usually done, in addition to being affected by the supply and demand of bills between two places, rise and fall in sympathy with the influences at work on the other exchanges. New York, for instance, whilst a debtor to

[1] The United States Mint will always pay for English sovereigns at the rate of $18.949182 per ounce. 1,000 sovereigns weigh 123,247.47 grains (480 grains to the ounce Troy). Working this out, we get $4,866.56 as the value of 1,000 sovereigns. As a matter of fact the United States Mint would pay the bank 90 per cent of this amount ($4,380) on delivery and the balance ten days later, less a small charge of four cents per $100 to cover melting expenses, thus the actual proceeds would be $4,864.61.

Similarly the British Mint will take gold eagles at £3:16:5½ per ounce, paying for them a fortnight after delivery without any charge. The Bank of England will pay for them on delivery but makes a small charge of about 1½d. per ounce to cover the interest for 14 days at 4 per cent.

England, may be a creditor of Germany, France or another country with which England has close exchange relations. New York drafts on these places are remitted to London and improve (i. e. lower) the rate of sterling exchange for the time being. If, however, the supply both of London and Continental bills falls short, the point at which New York will have to export gold is soon reached.

7. *Rates tend to correspond.*—The rates of exchange between two or more places either correspond or tend to correspond. Thus, when sterling exchange is at a discount in New York, say, at $4.85, New York funds in London will be at a premium; in other words, you could purchase in New York the right to obtain a sovereign in London for $4.85, whereas for a sovereign in London you would only be able to obtain the right to $4.85 in New York, a dollar costing 49.50d. instead of 49.316d., the par value.

Let us suppose that the rate in New York, in response to a demand for sterling, suddenly goes to par, and a New York banker, hearing from his London correspondent that New York funds are still at $4.85, cables him to sell $100,000 at that rate and as a result of this transaction the New York banker receives a credit in London of £20,618.55. At the same time he sells his own draft at par against this amount in London. In actual practice he would sell a draft of, say, £20,000, but for the sake of showing his profit let us presume that he sold a draft for £20,618.55. For this he receives $100,343.64 with which he pays the

draft of $100,000 drawn on him in London, and thus makes a profit of $343.64 less cable charges and a small commission to the London banker.

By such processes the exchanges automatically regulate themselves between two or more places. It is obvious that under the influence of several such transactions marginal differences would rapidly disappear. The variations in the rates of exchange in the case cited are purposely exaggerated for the sake of illustration. In practice, a very slight difference in the rates will encourage these adjusting transactions, which are commonly known as arbitrage transactions.

8. *Exchange quotations.*—The newspapers generally give exchange quotations in two columns. The first column (b) gives the price offered by buyers, and the other (s) gives the sellers' price; one expressing the demand and the other the supply. The first column gives the lowest quotations—the buyers naturally offer as low a price as possible, while the sellers try to obtain the highest price—but the real or trading quotation is generally somewhere between the two. There are two classes of quotations; the posted rate, which is used principally for small amounts, and the actual or wholesale rate, used between bankers and brokers for large transactions. As a rule, however, the rate for very large transactions is a matter of individual negotiations owing to the frequent change in conditions during the day. Furthermore, the rates are seldom announced in time

to be of much use except to show the general trend of exchange.

The principal exchanges quoted in the New York market are given below, with the equivalent Canadian quotations, after allowing 1/16 of one per cent discount on New York funds in Montreal. The alternate quotations for marks and francs are also shown.

	New York	Canada, Less 1/16 of 1%	Alternate Quotation
London:	$ per £ Stg.		
Cable	4.8575	4.8545	
Demand	4.8525	4.8495	
Commercial 60 days	4.8200	4.8170	
Bankers 60 days	4.8225	4.8195	
Berlin:	Cents per 4 Marks		Cts. per Mrk.
Check	94 1/16	94 5/8	.2365625
Amsterdam:	Cents per Florin		Cts. per Fl'n
Check	40.04	40.01½	.40+1/32
Hongkong:	Cents per Mex. $		
Check	49.	48.97	

New York funds being at 1/16 discount, the Canadian rate is arrived at by *deducting* 1/16 of 1% from the rate.

Cables are 8 days' interest more than demand according to steamer sailings.

60 days' rates are 63 days' interest and stamp (.0024) less than demand.

	Fcs. per $		Cts. per Fc.
Paris			
Cable	5.20 5/8	5.20 5/8—1/16	.191956
Check	5.20 5/8—1/32	5.20 5/8—3/32	.191896
Commercial 60 days	5.24 3/8—1/32	5.24 3/8—3/32	.190524

The Canadian rate is arrived at by *adding* 1/16 to the New York franc rate or *deducting* 1/16 from the dollar value.

The American method of quoting cents per foreign unit (fixed exchange) is so simple that the above table calls for no explanation, except in connection with the special quotations for francs and marks which is fully explained elsewhere.

9. *Range of the nine frequent quotations.*—Franc quotations range from about 5.10 to 5.30, advancing by 5/8 of a centime. Mark quotations range from 92 to 98 cents per 4 marks, advancing by 1/16 of a cent. Closer quotations for either the franc or the mark are

made in the form of fractional additions or deductions from the dollar value. Sterling quotations range from $4.75 to $4.95 advancing by 1/100 of a cent per pound or, as it is called, 5 points per pound.

The exchange rates on other countries are shown below. The quotations advance by steps of 1/100 or .01 of a cent, thus 18.01, 18.02, 18.06 and so on. The last column shows the profit made on $1,000 for every advance of .01 cent, the profit on 1,000 foreign units being, of course, 10 cents for each advance of .01 cent in the quotation.[1]

Country	Unit	Par Value in Dollars	Ordinary Range	Profit per $1,000
Latin Union	Franc	.193	18 to 20 cents	51.8 cents
Austria-Hungary	Crown	.203	20 to 22 "	49.2 "
Germany	Mark	.238	22 to 25 "	42. "
Scandinavian U.	Crown	.263	26 to 28 "	37.3 "
Holland	Florin	.402	39 to 41 "	24.9 "
Mexico, South America, Asia	Silver Dollar	fluctuating	41 to 50 "	22. "
Japan	Yen	.498	50 to 53 "	19. "
Russia	Rouble	.515	50 to 53 "	19. "
Great Britain	Pound	4.866	4.75 to 4.90	02. "

10. *Fixed and movable exchange.*—When foreign exchange is quoted in the home currency per foreign unit, it is called fixed exchange; for instance, exchange on London is quoted in New York in dollars and cents per pound sterling. The latter is the fixed basis. The value of the pound fluctuates in dollars and cents—the higher the quotation the higher the cost of the foreign unit.

[1] The best tables for general use are to be found in "Foreign Exchange Tables" by E. D. Davis, Minneapolis, and "Foreign Exchange Explained and Simplified" by Howard K. Brooks, Chicago. Both of these books cover the whole range of the foreign exchanges. The former is particularly adapted for large transactions requiring the use of close fractional quotations.

When the rate is quoted in foreign currency per home unit it is called movable exchange; for instance, exchange on Paris is quoted in New York in francs and centimes per dollar. The latter is the fixed basis. The fluctuation is expressed in the foreign currency—the higher the quotation the lower the cost of the foreign unit.

The United States and Canada quote in fixed exchange (dollars and cents per foreign unit) tho for large transactions with France and other members of the Latin Union movable exchange is used. A homely illustration may make the difference between these two methods of quoting clearer. Sugar and other commodities, like fixed exchange, are sold at so many cents per pound, or per hundred pounds, and the higher the price quoted the less sugar (or foreign money) you will receive for a dollar and therefore the dearer the exchange.

Sugar, like movable exchange, is also sold at so many pounds for the dollar (as is the case with French exchange) and the more sugar (or francs) quoted for a dollar the cheaper the exchange.

Fixed exchange: cents per foreign unit. Rule, buy low, sell high, the better the bill the higher the rate.

Movable exchange: francs per dollar. Rule, buy high, sell low, the better the bill the lower the rate.

11. *Conversions.*—Those countries which are fortunate enough to have a monetary unit in common, have no conversion to make and do not require any exchange tables. Among these are the United States

and Canada with the dollar in common, Great Britain and her colonies with the pound sterling, and the Latin Union with the franc. Fluctuations in exchange rates in these cases are quoted at either so much per cent discount or premium, or, as in the case of London and Australia, so many units for so many units, as £98 for £100.

The arithmetic of the exchange is very simple and requires only a knowledge of multiplication and division as the following rules show:

12. *Conversion for fixed exchange.*—(Conversion with cent quotations).

(A). Amount in foreign currency = Amount in dollars ÷ Rate in cents.

(B). Amount in dollars = Amount in foreign currency × Rate in cents. Buy low, sell high, the lower the rate the more foreign money you receive for a dollar.

To convert dollars into foreign currency we have the following rule: divide the amount in dollars by the rate in cents per foreign unit.

Examples: How many francs can be bought for $1,000 at 19.3 cents per franc?

1,000 ÷ 19.3 = 5,181.35 francs. Answer.

How many marks can be bought for $1,000 at 24 cents per mark?

1,000 ÷ 24 = 4,166.67 marks. Answer.

How many marks can be bought for $1,000 at 96 cents per 4 marks?

1,000 ÷ 96/4 = 4,166.67 marks. Answer.

How many kronen can be bought for $900 at 26.46 cents per krone?

$900 \div 26.46 = 3{,}401.36$ kronen. Answer.

To convert foreign currency into dollars, we may state the rule: multiply the amount in foreign currency by the rate in cents per foreign unit.

Examples: How much will drafts for the following amounts cost?

5,181.35 francs at 19.30 cents? $5{,}181.35 \times 19.3 =$ $1,000.

4,166.67 marks at 24 cents? $4{,}166.67 \times 24 =$ $1,000.

4,166.67 marks at 96 cents for four marks? $4{,}166.67 \times 96 \times \frac{1}{4} =$ $1,000.

3,401.26 kronen at 26.46? $3{,}401.26 \times 26.46 =$ $900.

13. *Conversion for movable exchange.*—(Conversion with franc quotations).

Amount in francs = Amount in dollars × Rate in francs.

Amount in dollars = Amount in francs ÷ Rate in francs. Buy high, sell low, the higher the rate the more francs you receive for a dollar.

To convert dollars into francs, the rule is: multiply amount in dollars by the rate in francs.

How many francs can be bought for $1,000 when the rate is 5.18⅛ per dollar?

$5.18125 \times 1{,}000 = 5{,}181.25$ francs.

To convert francs into dollars, the rule is: divide the amount in francs by the rate in francs.

What is the value of a draft on Paris for 5,181.25 francs when the rate is 5.18⅛ francs per dollar?

$$\frac{5{,}181.25}{5.18125} = \$1{,}000$$

Any fractional quotation is applied on the dollar value only. If the above rate had been 5.18⅛ + 1/64, the answer would be \$1,000.15 or \$1,000 + 1/64 of 1%.

We have not dealt fully with the fractional quotations of the franc, mark and florin, because as a rule, these are only encountered in large transactions. They are explained in Chapters XV, XVI and XVII.

14. *Simple arithmetic involved.*—If exchange is considered in its true nature, as a commodity, foreign exchange arithmetic will assume a form elementary in its simplicity, as the following examples show:

Fixed exchange.—

How many articles at 20 cents each can be purchased with \$100?

$100 \div .20 = 500$ articles.

How much will 500 articles cost at 20 cents each?

$500 \times .20 = \$100$.

Movable exchange.—

If one dollar will buy five articles, how many will \$100 buy?

$5 \times 100 = 500$ articles.

What is the value of 500 articles when one dollar will buy 5?

$500 \div 5 = \$100$.

In dealing with commodities any commission or percentage on the price is reckoned on the total dollar value. In buying and selling exchanges, the same rule is followed; fractional quotations apply only to the dollar value.

15. *Exchange tables.*—Exchange tables like interest tables, are most convenient and useful tools, and tho formidable in appearance with their serried columns of figures, they are simple in operation and their compilation is merely a matter of multiplication.

All exchange tables give the same information tho some give it in greater detail than others—the number of foreign units for so many dollars and the number of dollars for so many foreign units, at various rates. As an example, we will compile a brief franc table for the rate 5.16⅞. This, of course, represents the value of a dollar in francs and we must now find the value of 1 franc by division, $\frac{1}{5.16875} = .1934704$. We are now ready to compile our table as follows:

Francs	Dollars	Dollars	Francs
1	.1934704	1	5.16875
2	.3869408	2	10.33750
3	.5804111	3	15.50625
4	.7738815	4	20.67500
5	.9673519	5	25.84375
6	1.1608223	6	31.01250
7	1.3542926	7	36.18125
8	1.5477630	8	41.35000
9	1.7412334	9	46.51875

By continued multiplication of the top lines, this table can be extended indefinitely, but the above is sufficient to find the equivalent of any sum up to 1,000,000 francs or dollars.

890 francs at 5.16⅞ is found as follows: [1]

[1] In all exchange conversion, whether by table or otherwise, it is an excellent plan to verify results by mental calculation on a basis of $5 to the pound, 5 francs to the dollar, 25 cents to the mark and so on. This insures the accuracy of the decimal point and forms a rough check. Thus $890 \div 5$ francs $\simeq$ $178.

800 francs = $154.78
90 francs = 17.41

$172.19

Our next table would be at the rate of 5.17½ (or .1932367), or if we desire a closer quotation, 5.16–$\frac{1}{64}$ (.1934401), and so on for every quotation that is likely to be required.

REVIEW

What is the rate of exchange and what determines it?

Distinguish between the rate of exchange and the ratio of exchange.

What affects the intermediate points between the gold points and the mint par?

Why do exchange rates tend to correspond? Give an illustration.

How are exchange quotations given in newspapers? What are the two classes of quotations and how are they used?

Explain the difference between fixed and movable exchange.

CHAPTER V

FOREIGN REMITTANCES

1. *Non-commercial exchange.*—Altho the greater portion of foreign exchange originates in commercial transactions, there is a constantly increasing volume of exchange business created by travelers and immigration. A steady stream of travelers and others leave the United States and Canada each year to visit Great Britain, Europe and other parts of the world, carrying with them the necessary funds for their expenses in various forms, such as circular letters of credit, travelers' checks, drafts and gold.

The remittances of immigrants to their relatives and friends in their home lands amount to a surprisingly large figure in the course of a year. These remittances are generally made by means of drafts, foreign money orders, or by what are called mail remittances.

For many years these two classes of foreign business were in the hands of foreign bankers who made a specialty of the business of supplying banks, both in the United States and Canada, with the necessary forms and foreign machinery for issuing circular letters of credit and selling travelers' checks. Gradually the larger banks both in the United States and

Canada felt the increasing pressure of their clients' requirements in this connection, and found it advisable to establish their own systems of travelers' checks, etc. Practically every important bank has now direct correspondents in the principal cities of the world with whom they have made the necessary arrangements for the payment of circular letters, travelers' checks and the like.

A comparison of the different methods of remittance and a description of the manner in which they are operated is interesting.

2. *Principles underlying the issuance of drafts.*— A demand draft or check is an unconditional order issued by one bank on another bank or banking firm asking the bank to whom it is addressed to pay a certain sum of money to a specified person or institution. (See Figure 1.)

In the case of a bank keeping an account in another country where the exchange value of the currency is steady and for which rate quotations are easily obtainable, drafts are usually drawn in the currency of that country and, after payment, are charged to the account which the issuing bank keeps with its correspondent at the face amount. If the arrangement calls for payment of the drafts at par, the correspondent's commission (if any) is added to the face amount of the draft when charged to the account. Drafts are often made payable at the office of a third bank or banking firm for account of the issuing bank's correspondent.

Drafts are also issued on correspondents with whom no account is kept. In such cases, cover-drafts in favor of the correspondent for the amounts involved

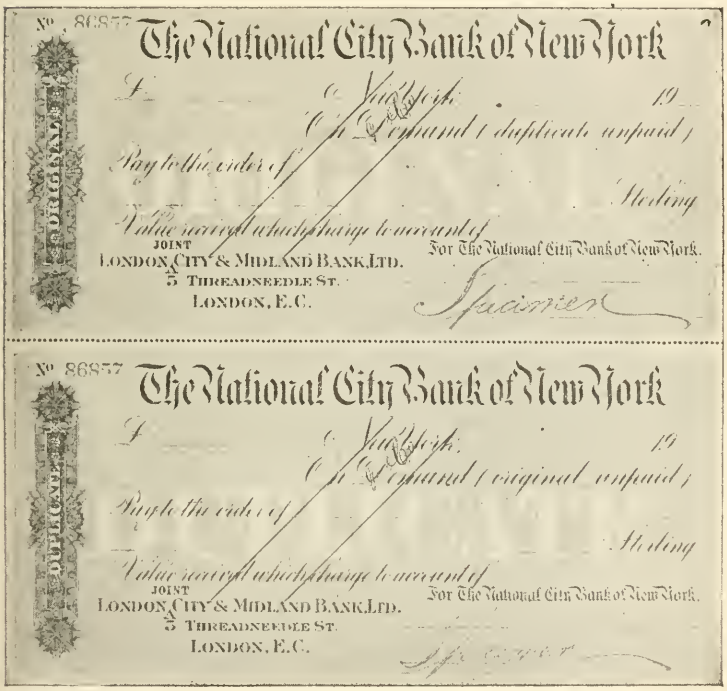

The National City Bank of New York
ORIGINAL
Pay to the order of
Sterling
Value received which charge to account of
JOINT
LONDON, CITY & MIDLAND BANK, LTD.
5 THREADNEEDLE ST.
LONDON, E.C.
For The National City Bank of New York.
The National City Bank of New York
DUPLICATE
Pay to the order of
Sterling
Value received which charge to account of
JOINT
LONDON, CITY & MIDLAND BANK, LTD.
5 THREADNEEDLE ST.
LONDON, E.C.
For The National City Bank of New York.

FIGURE 1. DRAFT

plus commission, drawn against the issuing bank's account in one of the large selling cities (London, Paris, Berlin, New York, etc.) are forwarded with the relative letters of advice, or the correspondent is requested to forward the paid draft to the issuing

bank's correspondent in one of these cities for redemption.

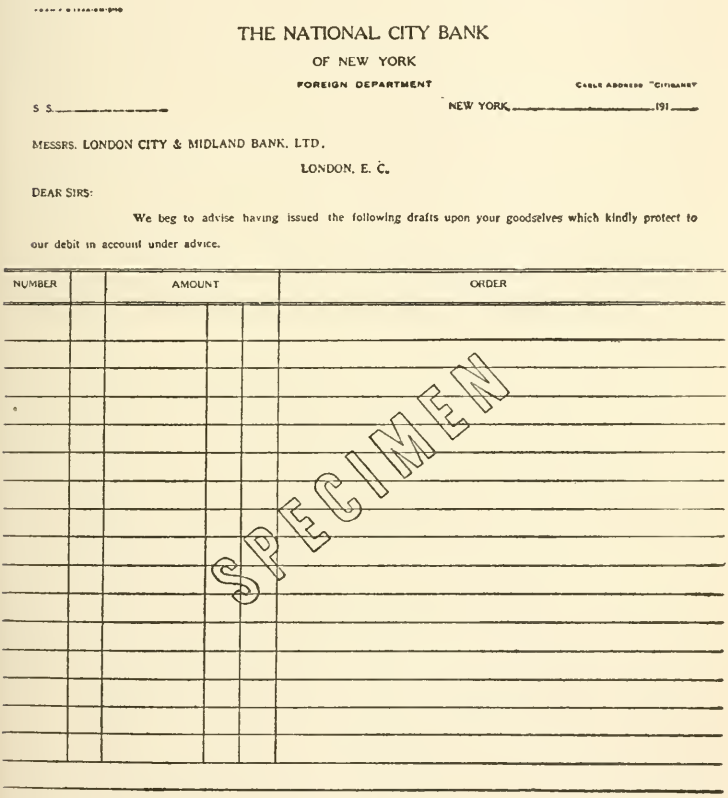
When a bank is requested to issue drafts on a country for which it has made no draft arrangements, a sterling draft on the bank's London, England, branch or correspondent is usually sold, sterling drafts on London being more easily negotiated than those drawn in other currencies, owing to the fact that the great majority of banks thruout the world have correspondents or accounts in that city, and the exchange rates for sterling are much steadier and more widely quoted than those for other currencies.

To guard against loss in the case of countries in Africa, Asia or South America where silver units exist or the exchange value of the currency is subject to great fluctuations, drafts are usually drawn in sterling on the London branch or correspondent of the issuing bank and crossed "Payable at the drawees' buying rate for sight bills on London," or with a phrase similar in meaning. The correspondent on whom such drafts are drawn pays them in local currency at a rate of exchange which includes his commission and other charges, and afterward forwards them to London for redemption at the face amount of sterling.

3. *Advices.*—A letter of advice (Figure 2), authenticating the draft and usually containing the following particulars, is sent to the branch or correspondent on whom the draft is drawn:

1. Number of the draft

2. Amount of the draft
3. Date of issue of draft
4. Name of payee
5. Name of bank at which drafts will be presented by bearer if other than correspondent drawn on (if



THE NATIONAL CITY BANK

OF NEW YORK

FOREIGN DEPARTMENT CABLE ADDRESS "CITIBANK"

S. S. _____ NEW YORK, _____ 191__

MESSRS. LONDON CITY & MIDLAND BANK, LTD.

LONDON, E. C.

DEAR SIRS:

We beg to advise having issued the following drafts upon your goodselves which kindly protect to our debit in account under advice.

NUMBER		AMOUNT			ORDER

SPECIMEN

Yours truly,

FIGURE 2. LETTER OF ADVICE (DRAFTS)

the draft is to be readvised to bank at which it will be presented, a note to this effect is added to the advice).

6. Particulars of the mode of reimbursement (cover-draft inclosed, debit amount to account, etc.).

Should the draft be payable by a third party (see above) for account of the correspondent on whom it is drawn, this third party is also advised either by the issuing bank direct or by its correspondent on receipt of advice from the issuing bank.

The relative advices should be dispatched as soon as possible after the sale of the drafts in order that payment may not be refused thru the correspondent's being unable (in the absence of advice) to authenticate the drafts.

4. *Specimen forms and signatures.*—Each bank furnishes the correspondents on whom it has arranged to issue drafts, with specimens of the special draft form and of the special advice form (if any) it will use, together with specimen signatures of the officers who are authorized to sign drafts and advices on its behalf. If possible, a specimen signature of the payee is also forwarded with the advice of a draft, so that any possible difficulty in establishing the *bona fides* of the payee and draft may be avoided.

5. *Cost of drafts to purchasers.*—The amount to be charged by the issuing bank to the purchaser of a demand draft is ascertained by adding together the amounts mentioned below:

1. Face amount of the draft (if drawn in a for-

eign currency the amount is converted into local currency at the rate of exchange for the day)

2. Commission of the issuing bank
3. Commission (if any) of the paying bank
4. Cost of postage on advices.

6. *Travelers' checks.*—Travelers' checks enable a traveler to provide himself with funds without delay in a convenient yet inexpensive manner, at any point of his journey. They are issued in denominations of even amounts ($10, $20, $50, $100 and $200; £5, £10, £20, etc.), with the exact equivalent in the moneys of the principal foreign countries stated on the face of each check. (See Figures 3 and 4.) They may be cashed practically anywhere, are self-identifying and easily negotiated, and are therefore one of the safest and best forms in which to carry money when traveling. They are issued by all first-class banks at a small premium.

So far as travelers are concerned, such checks are often more convenient than drafts. The latter must be cashed in one lump sum which may be much larger than the traveler wishes to carry on his person, and which may be a positive disadvantage if he passes into another country where a different currency is in use. The checks are for relatively small amounts, can be cashed as needed and are generally accepted by hotels and large stores, without imposing on the traveler the burden of cashing them at a bank.

In view of the undoubted advantages in their particular sphere which travelers' checks possess over

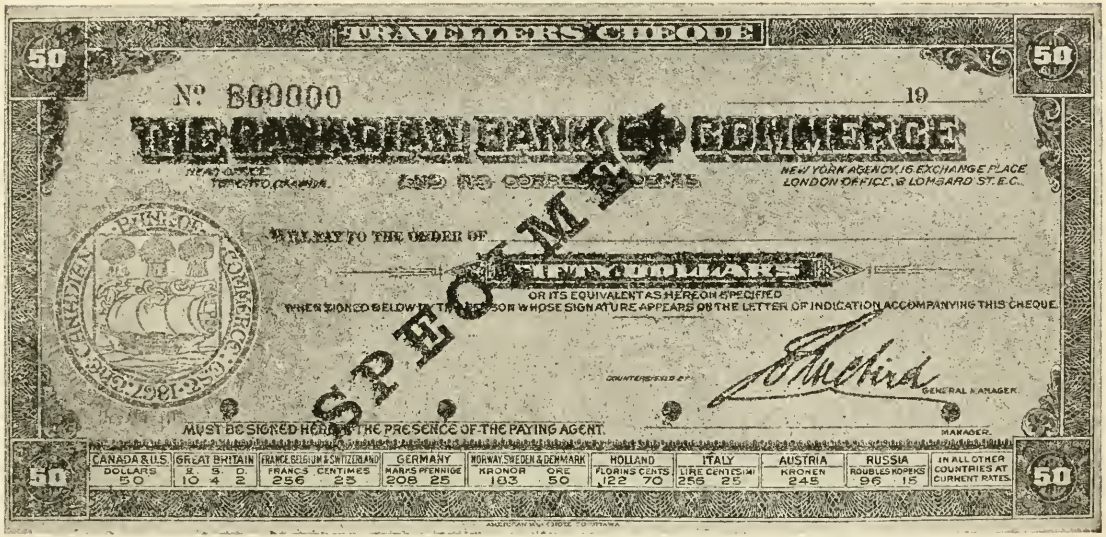

TRAVELLERS CHEQUE
50
No B00000
19
THE CANADIAN BANK OF COMMERCE
HEAD OFFICE TORONTO, CANADA
AND ITS CORRESPONDENTS
NEW YORK AGENCY 16 EXCHANGE PLACE
LONDON OFFICE 2 LOMBARD ST. E.C.
PAY TO THE ORDER OF
FIVE DOLLARS
OR ITS EQUIVALENT AS HEREIN SPECIFIED
WHEN SIGNED BELOW BY THE PERSON WHOSE SIGNATURE APPEARS ON THE LETTER OF INDICATION ACCOMPANYING THIS CHEQUE
SPECIMEN
COUNTERSIGNED BY
GENERAL MANAGER
MANAGER
MUST BE SIGNED HERE IN THE PRESENCE OF THE PAYING AGENT
CANADA & U.S. DOLLARS 50
GREAT BRITAIN £ 10 S. 4 D. 2
FRANCE BELGIUM & SWITZERLAND FRANCS 256 CENTIMES 25
GERMANY MARKS 208 PFENNIGE 25
NORWAY SWEDEN & DENMARK KRONOR 103 ORE 50
HOLLAND FLORINS 22 CENTS 70
ITALY LIRE 256 CENTESIMI 25
AUSTRIA KRONEN 245
RUSSIA ROUBLES 96 KOPEKS 15
IN ALL OTHER COUNTRIES AT CURRENT RATES
AMERICAN BANK NOTE CO. OTTAWA

FIGURE 3. TRAVELERS' CHECK

During the war the equivalents designated as payable in enemy countries, or countries occupied by the enemy, were canceled.

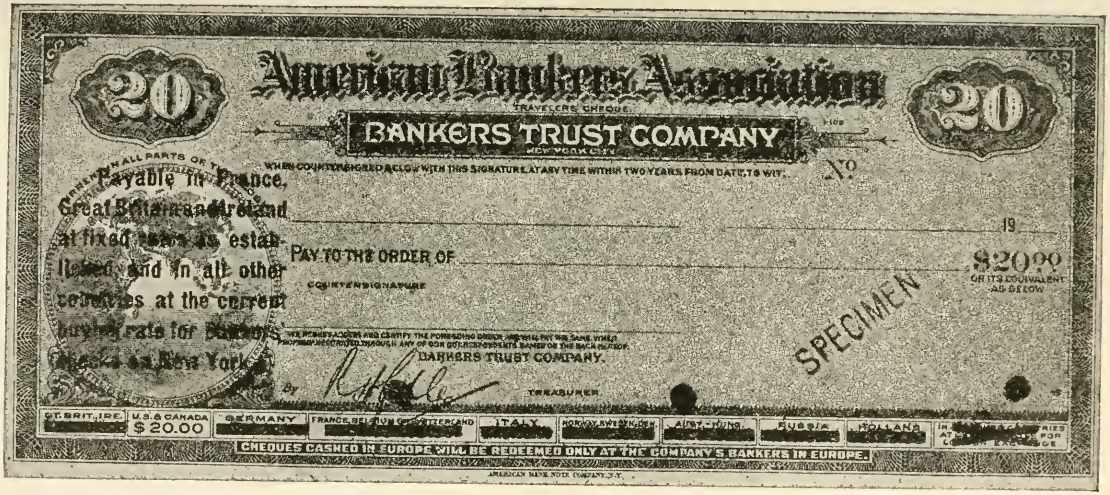


FIGURE 4. TRAVELERS' CHECK

"Owing to the unsettled political conditions and the consequent irregularity of exchange rates, it is not feasible to show rates on cheques which may be printed some time before actual sale to travelers. Fixed rates are established from time to time with French and English correspondents and these rates may be obtained by the traveler at the time of purchase by inquiry at the issuing bank, who are advised of such changes."

drafts, their greater cost, the widespread nature of the initial arrangements and the fact that the exchange charged by correspondents on the checks is met by the issuing bank, the slightly higher commission charge which is made by banks for travelers' checks is fully justified.

7. *Payment of checks.*—The issuing bank usually holds the paying agents of their travelers' checks free from responsibility in cashing such checks, provided:

(a) The holder signs them in the presence of the paying agent.

(b) The signature of the holder and that of the countersigning officer agree with the signatures contained in the relative letter of indication.

(c) The numbers of the checks are entered on the letter of indication.

(d) The checks are negotiated within the period specified (usually twelve months from date of issue).

(e) The other general terms of the circular of instructions are duly complied with.[1]

8. *Payment to holders.*—In countries specified on the face of the check the face amount of local currency is paid to the holder without deduction except for revenue stamps (if any).[2]

[1] This circular of instructions is generally printed in the principal commercial languages for the benefit of paying agents.

[2] Altho a fixed amount of sterling is specified for Great Britain on the face of travelers' checks, it should be borne in mind that the sterling current in Australia, British South Africa, British West Indies, etc., is of a quite different exchange value. A similar remark may also be made regarding the colonies and dependencies of other countries which use the same currency (francs, etc.) as the respective mother country.

In other countries the equivalent of the sterling amount is paid to the holder at a rate of exchange which includes the commission and other charges of the paying agent.

In countries where a revenue stamp is necessary the cost of such stamp is charged to the holder of the check.[1]

9. *Redemption of checks.*—Paid travelers' checks are redeemed as follows:

(a) If paid in North America, they are forwarded to the New York office or correspondent of the issuing bank of redemption at the face amount of dollars plus the commission agreed upon.[2]

(b) If paid outside North America, they are forwarded to the London, England, branch or correspondent of the issuing bank for redemption at the face amount of sterling (or its equivalent) at the current rate of exchange plus commission at the rate agreed upon. (In the case of countries not specified

In such places all travelers' checks are paid at the current rate for purchasing exchange on the capital of the respective mother country.

[1] Hotels, steamship companies, department stores, etc., usually accept travelers' checks *in payment of customers' accounts,* but do not bind themselves to cash checks for the purpose of providing the holder with funds.

[2] As travelers' checks paid in North America are checks on New York, banks at points where New York exchange is usually at a premium often make no commission charge for cashing the checks.

In the case of Canadian banks which issue travelers' checks, it is customary to redeem each other's checks at par when the two banks concerned are represented locally. In other cases they are redeemed thru the Clearing House or otherwise by any branch of the issuing bank which is convenient for the purpose, at the face amount plus the usual commission on checks paid and redeemed in North America, namely, 1/10 of 1 per cent, minimum 5 cents each.

on the face of the check, the paying agent has already obtained his commission from the conversion of sterling into local currency and the checks are therefore redeemed at the face amount of sterling).

(c) Banks having extensive business relations with various European countries occasionally appoint their chief correspondents in the respective countries as central redemption agents for their travelers' checks. In such cases the paid checks are forwarded to these correspondents for redemption at the face amount of local currency plus the commission agreed upon, and are debited to the account which the issuing banks keep with these correspondents.

(d) Hotels, department stores and private bankers often hand travelers' checks paid by them to a local bank for redemption, such third parties being allowed a commission of, say, ½₀ of 1 per cent, which is added by the local bank to its own commission when forwarding the check to a central correspondent for redemption.

10. *Letter of indication.*—Each purchaser of travelers' checks is furnished with a letter of indication (Figure 5), usually bound with the list of paying agents, specifying the numbers of the travelers' checks sold to him and signed by the purchaser and the officer who countersigned the checks. It is indispensable to the security of the holder that this letter of indication be carried separately from the travelers' checks.

A few institutions do not issue a letter of indication with their travelers' checks. In these cases two

spaces, one at the top and one at the bottom (see Figure 6), are provided on the check form for the signature of the holder. The first signature is made in the presence of the officer who issues the checks, and the second in the presence of the paying agent, who compares the two signatures to establish their identity. This system, however, readily lends itself to forgery should the checks be lost or stolen, as the presenter of the checks has a copy of the necessary signature before him while signing the checks, or the signature may be lightly traced in pencil in the space provided before presentation and covered with ink in the presence of the paying agent.

During 1913 the *Fédération Universelle des Sociétés d'Hôteliers* (with which the principal hotels of the world are associated) addressed a circular letter to the various issuers of travelers' checks stating that in view of the risk involved, payment by the leading hotels of travelers' checks of this form would thereafter be more or less uncertain, and suggesting that the banks adopt the safer method whereby the specimen signatures of the purchaser and the countersigning officer are given in a separate letter of indication.

11. *Lost travelers' checks.*—The same care should be taken of travelers' checks as of money, and due precautions taken to avoid risk of loss. Should this occur, however, the holder is advised to communicate immediately by telegraph with one of the redemption agencies of the issuing bank or the branch at which

the checks were obtained, so that the presenter of such checks may be traced without delay.

The issuing bank will usually refund to the owner the face value of lost or destroyed checks, or will issue a new supply in their stead, upon receipt of sufficient evidence of loss or destruction thereof and the execution of a satisfactory bond of indemnity, provided the holder immediately notifies the bank by telegraph of the loss as mentioned above.

Travelers' checks are useful for those carrying comparatively small sums of money, as they can be negotiated at hotels, department stores, etc., where it is impossible to secure funds under letters of credit, but those who require to provide themselves with large sums, say, $1,000 or over, will find a letter of credit more convenient. A good plan for many travelers is to carry both.

12. *Letters of credit.*—The principal banks of the world issue letters of credit designed specially for the use of travelers. They are accompanied by a letter of indication (see Figure 7), and are of two kinds, namely:

(a) Domestic, drawn in local currency for use in the country where they are issued (Figures 8 and 8A), and,

(b) Foreign, usually drawn in sterling (Figures 9 and 9A).

The holder of one of these credits may draw any sum he desires, up to the amount of the credit, thru correspondents at all the principal places visited by

.....191....

To Our Correspondents:
Gentlemen,

M ....
whose signature is to be found below, is the holder of our Travelers' Checks as follows:

No. X.....to No. X.....inclusive,
of the denomination of $10.

No. A.....to No. A.....inclusive,
of the denomination of $20.

No. B.....to No B. .....inclusive,
of the denomination of $50.

No. C.....to No C.....inclusive,
of the denomination of $100.

No. D.....to No. D.....inclusive,
of the denomination of $200.

We commend ..... to your usual courtesies.

For The.....Bank

.....
(This signature must agree with the countersignature on the checks.)

SIGNATURE OF

.....
(Must be inserted at the time the checks are purchased.)

LETTER OF INDICATION ACCOMPANYING TRAVELERS' CHECKS

Figure 5

.....191....

To Our Correspondents:
Gentlemen,

M .....
the bearer of this letter, whose signature is to be found below, has been supplied with our Circular Letter of Credit No.....and we commend.....
to your usual courtesies.

For The.....Bank

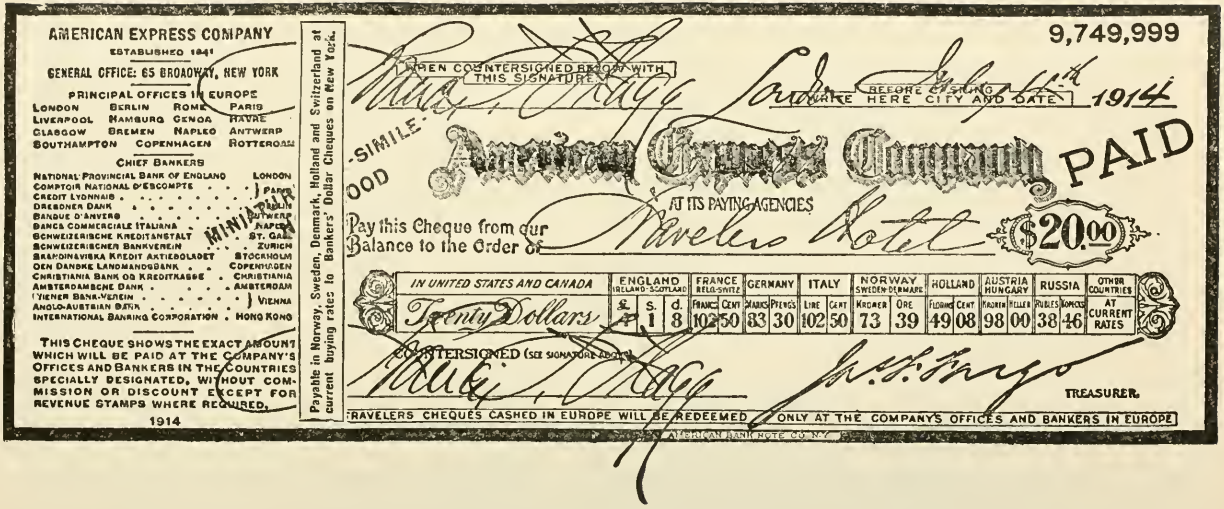
.....

SIGNATURE OF

....

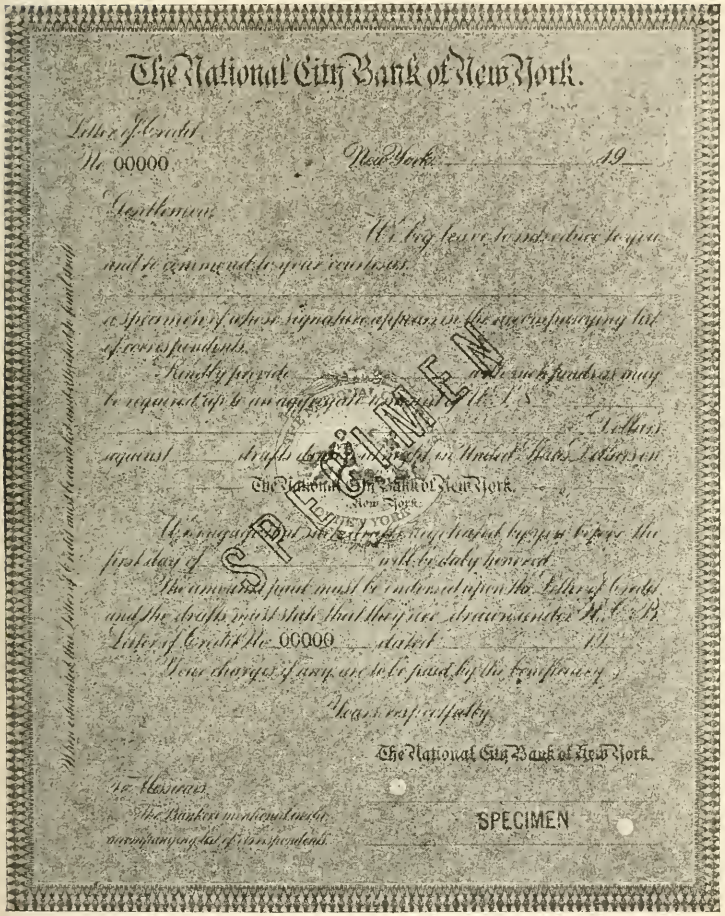
LETTER OF INDICATION ACCOMPANYING LETTER OF CREDIT

Figure 7


AMERICAN EXPRESS COMPANY
ESTABLISHED 1841
GENERAL OFFICE: 65 BROADWAY, NEW YORK
PRINCIPAL OFFICES IN EUROPE
LONDON BERLIN ROME PARIS
LIVERPOOL HAMBURG GENOA HAVRE
GLASGOW BREMEN NAPLES ANTWERP
SOUTHAMPTON COPENHAGEN ROTTERDAM
CHIEF BANKERS
NATIONAL PROVINCIAL BANK OF ENGLAND LONDON
COMPTOIR NATIONAL D'ESCOMPTE PARIS
CREDIT LYONNAIS
DRESDNER BANK BERLIN
BANQUE D'ANVERS ANTWERP
BANCA COMMERCIALE ITALIANA NAPLES
SCHWEIZERISCHE KREDITANSTALT ST. GALL
SCHWEIZERISCHER BANKVEREIN ZURICH
SKANDINAVISKA KREDIT AKTIEBOLAGET STOCKHOLM
DEN DANSKE LANDMANDSBANK COPENHAGEN
CHRISTIANIA BANK OG KREDITKASSE CHRISTIANIA
AMSTERDAMSCHE BANK AMSTERDAM
WIENER BANK-VEREIN VIENNA
ANGLO-AUSTRIAN BANK
INTERNATIONAL BANKING CORPORATION HONG KONG
THIS CHEQUE SHOWS THE EXACT AMOUNT WHICH WILL BE PAID AT THE COMPANY'S OFFICES AND BANKERS IN THE COUNTRIES SPECIALLY DESIGNATED, WITHOUT COMMISSION OR DISCOUNT EXCEPT FOR REVENUE STAMPS WHERE REQUIRED.
1914
Payable in Norway, Sweden, Denmark, Holland and Switzerland at current buying rates to Bankers' Dollar Cheques on New York.
9,749,999
WHEN COUNTERSIGNED BEGIN WITH THIS SIGNATURE
SIMILE
OOD
BEFORE SIGNING WRITE HERE CITY AND DATE
1914
American Express Company
PAID
AT ITS PAYING AGENCIES
Pay this Cheque from our Balance to the Order of
Travelers Hotel
$20.00
IN UNITED STATES AND CANADA
Twenty Dollars
ENGLAND IRELAND-SCOTLAND £ 4 S. 1 d. 8
FRANCE BELG-SWITZ FRANCS 102 CENT 50
GERMANY MARKS 83 PFENGS 30
ITALY LIRE 102 CENT 50
NORWAY SWEDEN-DENMARK KRONER 73 ORE 39
HOLLAND FLORINS 49 CENT 08
AUSTRIA HUNGARY KRONEN 98 HELLER 00
RUSSIA RUBLES 38 KOPECS 46
OTHER COUNTRIES AT CURRENT RATES
COUNTERSIGNED (SEE SIGNATURE ABOVE)
TREASURER.
TRAVELERS CHEQUES CASHED IN EUROPE WILL BE REDEEMED ONLY AT THE COMPANY'S OFFICES AND BANKERS IN EUROPE
AMERICAN BANK NOTE CO. N.Y.

TRAVELERS' CHECK WITHOUT LETTER OF INDICATION

FIGURE 6



The National City Bank of New York.

Letter of Credit

No. 00000 New York, 19

Gentlemen:

We beg leave to introduce to you and to commend to your courtesies

a specimen of whose signature appears in the correspondency list of correspondents.

Kindly provide [illegible] and such funds as may be required up to an aggregate amount of U. S. $ [illegible] Dollars

against drafts drawn at sight on the United States Exchange

The National City Bank of New York.

New York.

SPECIMEN

Your engagement in this respect may be duly honored if presented on or before the first day of [illegible] and not thereafter.

The amount and date must be indorsed upon the Letter of Credit and the drafts must state that they are drawn under U. S. B. Letter of Credit No. 00000 dated 19

Your charges if any are to be paid by the beneficiary.

Yours very truly,

The National City Bank of New York.

To Messrs.

The Bankers mentioned in the accompanying list of correspondents.

SPECIMEN

We have attached this Letter of Credit and Draft to each of the Bankers mentioned in the accompanying list

FIGURE 8. CIRCULAR (DOLLAR) LETTER OF CREDIT (FRONT)

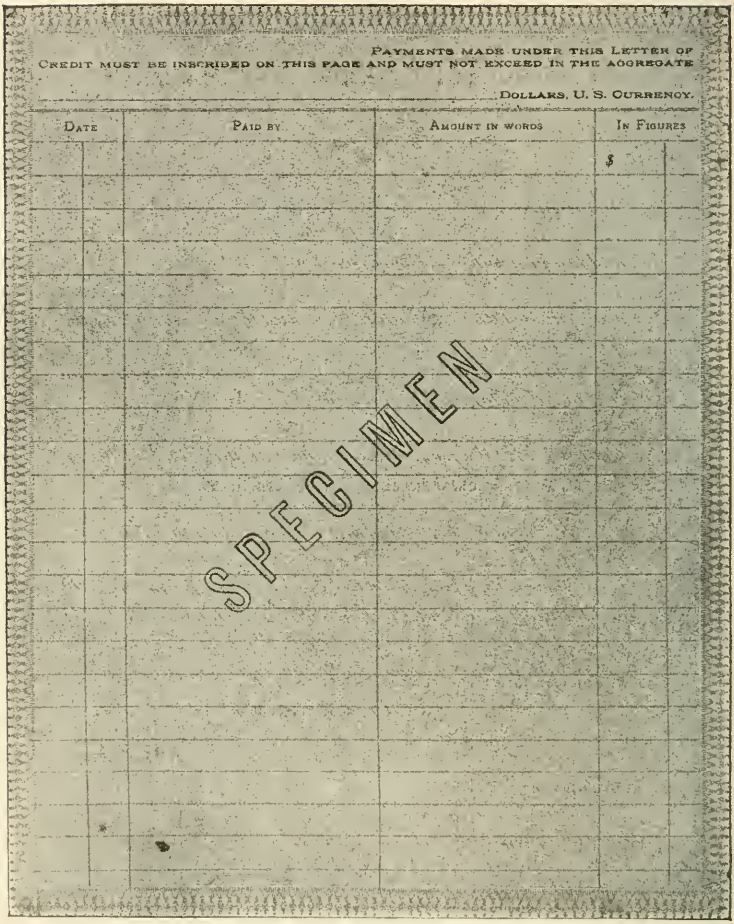

PAYMENTS MADE UNDER THIS LETTER OF CREDIT MUST BE INSCRIBED ON THIS PAGE AND MUST NOT EXCEED IN THE AGGREGATE
DOLLARS, U. S. CURRENCY.
DATE
PAID BY
AMOUNT IN WORDS
IN FIGURES
$
SPECIMEN

FIGURE 8a. CIRCULAR (DOLLAR) LETTER OF CREDIT (BACK)

CIRCULAR LETTER OF CREDIT

No.....

£.....*Stg.*

ISSUED BY

THE.....BANK.

..... 19....

To the Bankers
named in our Letter of Indication.

This letter will be presented to you by

....

..... *in whose favor we have opened a credit of*

..... *Sterling*

to be availed of by ..... *demand drafts on*

The.....*Bank, London.*

which we request that you will negotiate at the current rate of the day, less your usual charges.

The drafts should bear the following clause:—"Drawn under Credit No. .....*"; they should be drawn within one year from the date hereof, and the date and amount of each draft cashed are to be entered in the space provided on the back of this letter.*

M.....

provided with a copy of our Letter of Indication, whereon ..... *signature may be found.*

For The.....*Bank.*

.....

.....

CIRCULAR (STERLING) LETTER OF CREDIT

FIGURE 9

SPECIFICATION

Of Payments Made Under This Letter of Credit

Date When Paid	Paid by	Amount in Words	Amount in Figures

CIRCULAR (STERLING) LETTER OF CREDIT (Back)

Figure 9a

business men and tourists thruout the world. A list of paying agents is supplied to each purchaser.

13. *Payment to the holder.*—The holder draws a draft on the central correspondent of the issuing bank designated in the letter of credit for the amount of money he requires and presents it to one of the paying agents designated in the list of paying agents. The paying agent then compares the signature on the draft with that given in the relative letter of indication and authenticates the signature of the officers appearing on the letter of credit by means of the specimens he has on file. If the signatures are in order he makes payment and enters the particulars of the draft on the back of the letter of credit.

In accordance with the usual banking custom the paying agent deducts his commission at the time payment is made to the holder of the letter of credit, but should the letter of credit request him to make payments without deduction, his commission is added to the amount of the draft when forwarding it for redemption to the branch or correspondent of the issuing bank named in the letter of credit. If the letter of credit is not drawn in local currency, the paying agent makes payment at a rate of exchange which includes his commission.

The banker who pays the draft, exhausting the letter of credit, forwards it to the central agent together with the draft for redemption.

Advised or restricted letters of credit are similar in form to circular letters of credit, except that they are

advised direct to the correspondents to whom they will be presented for payment, and specimen signatures of the holder are forwarded to these correspondents, so that a letter of indication is unnecessary.

Letters of credit are available for the period specified thereon only (generally twelve months or less), and paying agents should always take care to see that this period has not expired when a letter of credit is presented to them for negotiation.

14. *Circular notes.*—Circular notes (often written in French) are similar in form, payment and redemption to travelers' checks. They are issued for fixed even amounts of a given currency (pounds sterling, dollars, etc.), and are payable at that amount without deduction in countries which use that currency. In countries where the local currency differs from that designated on the circular notes, the equivalent of the amount is paid at the current rate of exchange. The amounts of local currencies to be paid to the holder are not specified on the face of the note, and this constitutes the chief difference between circular notes and travelers' checks (see Figure 9b).

15. *Foreign money orders.*—There is no cheaper, safer or more convenient means of remitting small sums of money to any part of the world than that of foreign money orders or bankers' limited checks (Figure 10). The latter have fixed limits in various currencies. For amounts in excess of the sums stated, it is cheaper and more convenient to purchase a draft.

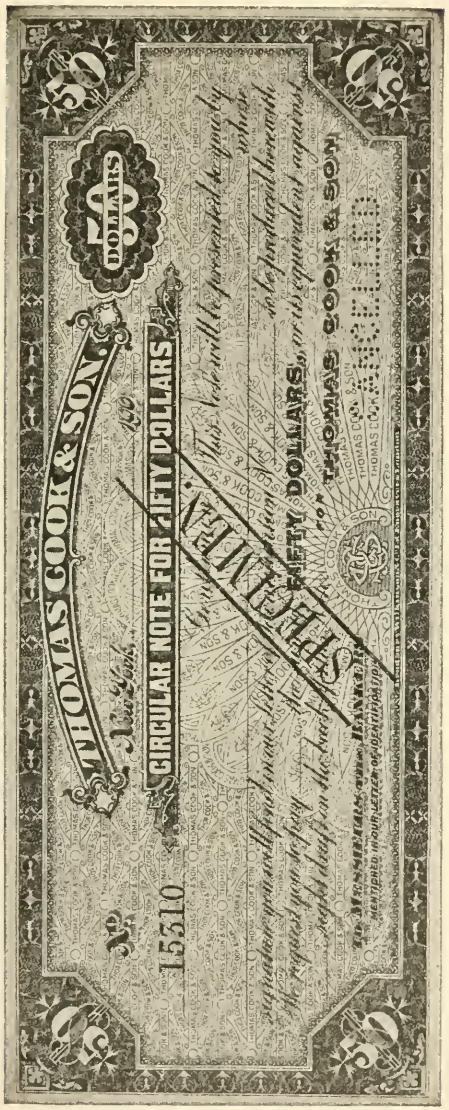


FIGURE 9b. CIRCULAR NOTE

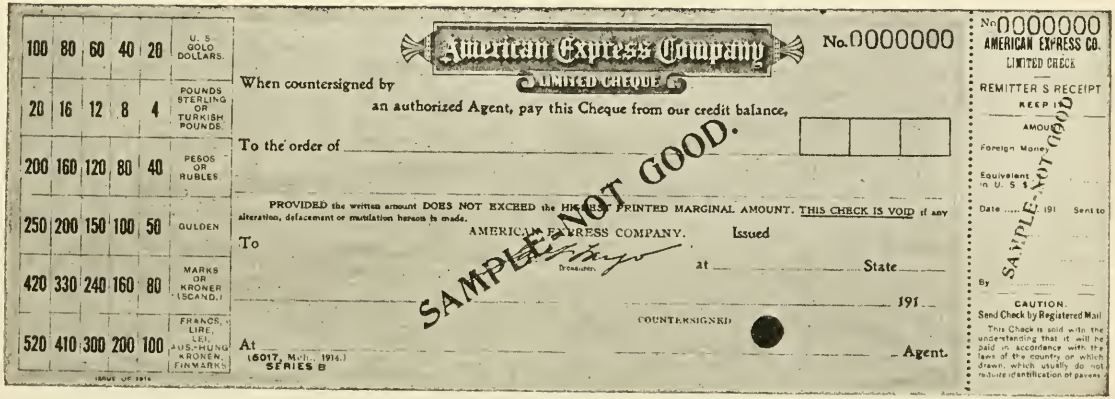

American Express Company
LIMITED CHEQUE
No. 0000000
When countersigned by
an authorized Agent, pay this Cheque from our credit balance,
To the order of
PROVIDED the written amount DOES NOT EXCEED the HIGHEST PRINTED MARGINAL AMOUNT. THIS CHECK IS VOID if any alteration, defacement or mutilation hereon is made.
To
AMERICAN EXPRESS COMPANY. Issued
Treasurer.
at
State
191
COUNTERSIGNED
At
Agent.
(6017, M-11., 1914.)
SERIES B
SAMPLE-NOT GOOD.
100 80 60 40 20 U. S. GOLD DOLLARS.
20 16 12 8 4 POUNDS STERLING OR TURKISH POUNDS.
200 160 120 80 40 PESOS OR RUBLES.
250 200 150 100 50 GULDEN
420 330 240 160 80 MARKS OR KRONER (SCAND.)
520 410 300 200 100 FRANCS, LIRE, LEI, AUS.-HUNG KRONEN, FINMARKS
ISSUE OF 1914
No. 0000000
AMERICAN EXPRESS CO.
LIMITED CHECK
REMITTER'S RECEIPT
KEEP ID
AMOUNT
Foreign Money
Equivalent in U. S. $
Date ..... 191 Sent to
By
SAMPLE-NOT GOOD
CAUTION.
Send Check by Registered Mail
This Check is sold with the understanding that it will be paid in accordance with the laws of the country on which drawn, which usually do not require identification of payees.

FIGURE 10. FOREIGN LIMITED CHECK

16. *Payment of orders.*—Foreign money orders are *not* usually advised to the paying agents, but the issuing bank, as a rule, holds the paying agents of their foreign money orders free from responsibility in cashing them, provided:

(a) The money orders are drawn on the proper form.

(b) The amount of any one money order does not exceed the limit fixed by the issuing bank.

(c) The signatures of the officers on the money order agree with the specimen signatures of authorized signing officers on file.

(d) The money order is presented for payment within, say, twelve months of the date of issue. (After the expiration of this period the money orders are payable only at the head office of the issuing bank.)[1]

PAYMENT TO HOLDERS

(a) In Great Britain and Ireland the face amount of sterling is paid to the holder without deduction except for revenue stamps.

(b) In countries other than Great Britain and Ireland the equivalent of the sterling amount is paid to the holder at a rate of exchange which includes the commission and other charges of the paying agent. In countries where a revenue stamp is necessary the

[1] Specimen forms and signatures are, of course, supplied to the paying agents when the arrangement for the encashment of foreign money orders is made.

cost of such stamp is charged to the holder of the foreign money order.[1]

REDEMPTION

(a) Foreign money orders paid in Great Britain and Ireland are redeemed by the London, England, branch or correspondent of the issuing bank, at the face amount of sterling plus the commission agreed upon.

(b) Foreign money orders paid in countries other than Great Britain and Ireland are redeemed by the London, England, branch or correspondent of the issuing bank at the face amount of sterling.

17. *Mail remittances.*—To meet the requirements of emigrants and to facilitate the transfer of sums of money to places where banking facilities are somewhat limited, a special class of transactions, called mail remittances, has been instituted. By this system a bank in one country requests its chief correspondent in another country to pay a certain sum to a specified person in that country, and incloses a draft in favor of the correspondent to cover the amount involved and the correspondent's commission (which is usually the same as for drafts). The correspondent in the country then forwards the amount (or its equivalent in local currency) to the beneficiary by registered mail

[1] To meet cases where the issuing bank is asked to specify on a foreign money order the actual amount of local currency which will be paid to the beneficiary, a fixed rate of exchange (kronen 23.50, francs 25.10, marks 20.30, etc., to the pound sterling) is established so that the expense of furnishing quotations at frequent intervals may be avoided.

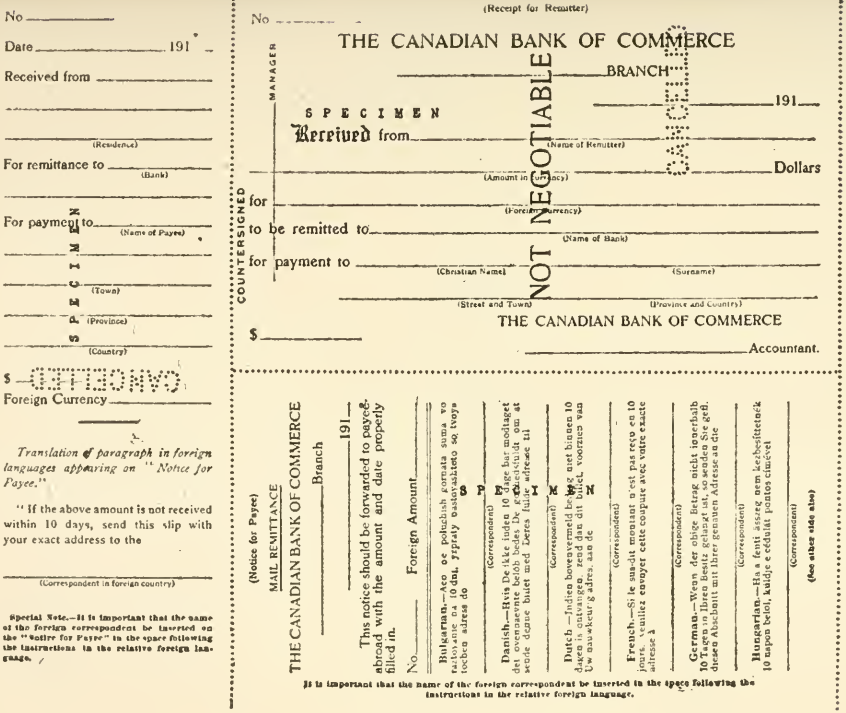

No
Date 191
Received from
(Residence)
For remittance to
(Bank)
For payment to
(Name of Payee)
(Town)
(Province)
(Country)
$
Foreign Currency
SPECIMEN
Translation of paragraph in foreign languages appearing on "Notice for Payee."
"If the above amount is not received within 10 days, send this slip with your exact address to the
(Correspondent in foreign country)
Special Note.—It is important that the name of the foreign correspondent be inserted on the "Notice for Payee" in the space following the instructions in the relative foreign language.
(Receipt for Remitter)
No
THE CANADIAN BANK OF COMMERCE
BRANCH
191
MANAGER
SPECIMEN
Received from
(Name of Remitter)
(Amount in Currency)
Dollars
for
(Foreign Currency)
to be remitted to
(Name of Bank)
for payment to
(Christian Name)
(Surname)
(Street and Town)
(Province and Country)
COUNTERSIGNED
NOT NEGOTIABLE
THE CANADIAN BANK OF COMMERCE
$
Accountant.
(Notice for Payee)
MAIL REMITTANCE
THE CANADIAN BANK OF COMMERCE
Branch
191
This notice should be forwarded to payee abroad with the amount and date properly filled in.
No.
Foreign Amount
SPECIMEN
Bulgarian.—Ако се получишъ горната сума, то съобщи на 10 дни, трябва пълнейшо, за това писмо до
(Correspondent)
Danish.—Hvis De ikke inden 10 Dage har modtaget det ovenanævnte Beløb bedes De gørekendt dette, at sende denne Blanket med Deres fulde Adresse til
(Correspondent)
Dutch.—Indien bovenvermeld bedrag niet binnen 10 dagen in uw bezit is, dient dit bericht, voorzien van Uw duidelijk gadres, aan de
(Correspondent)
French.—Si le susdit montant n'est pas reçu en 10 jours, veuillez envoyer cette coupure avec votre exacte adresse à
(Correspondent)
German.—Wenn der obige Betrag nicht innerhalb 10 Tagen bei Ihnen eingetroffen ist, senden Sie gefl. diesen Abschnitt mit Ihrer genauen Adresse an die
(Correspondent)
Hungarian.—Ha a fent áttett nem kézbesítetnék 10 napon belül, kérjük e cédulát pontos címével
(Correspondent)
(See other side also)
It is important that the name of the foreign correspondent be inserted in the space following the instructions in the relative foreign language.
(Letter of Advice for Correspondent)
No.
THE CANADIAN BANK OF COMMERCE
Branch
191
SPECIMEN
Gentlemen Please pay to
(Name of Payee)
(Town)
(Province)
the sum of
(Foreign Currency)
from
(Name of Remitter)
(Town) (Address of Remitter) (Province)
A cover draft for
in favor of yourselves is enclosed herewith.
Manager.
Accountant.

FIGURE 11. RECEIPT FOR MAIL REMITTANCE

or thru its agents in the town where the beneficiary resides.

In order to make sure that the amount reaches its destination safely, the purchaser is furnished by his bank with two slips, one a receipt for the money he has paid and the other a notice (with translations thereof in various foreign languages) for transmission to the beneficiary, which instructs him (the beneficiary) to communicate with the central correspondent if the sum mentioned thereon is not received within the course of a fixed number of days. (See Figure 11.)

REVIEW

What is a demand draft? Describe some of the ways in which drafts are paid.

What does a letter of advice usually contain?

How are travelers' checks redeemed?

What is a letter of indication? Why is it issued?

What kinds of letters of credit are issued? How does the holder secure payment?

When are paying agents of travelers' checks free from responsibility in cashing such checks?

CHAPTER VI

BILLS OF EXCHANGE

1. *Bills of exchange.*—It has already been indicated that the fundamental purpose of a draft or bill of exchange is to settle debts and thus avoid the necessity of shipping gold. To satisfy a debt in one country by offsetting the amount against a debt due in another country, leaving only the difference, if any, to be remitted in gold, is no less effective a means of payment as a double shipment of money, and is obviously far more economical. In this way, the difference or balance of payments as it is called, is settled by the debtor nation shipping gold or arranging a postponement of payment by means of finance bills or other corrective transactions.

A check is merely a demand bill of exchange drawn on a bank. Bills of exchange or drafts, as we shall now call them, assume a variety of forms and tenor, but, no matter what their currency or form, the underlying principle is the same, namely, that of a creditor drawing a draft upon an actual or constructive debtor.

Bills of exchange can be broadly divided into two classes according to their currency, known as short and long exchange.

Short exchange includes cable transfers, checks, bank drafts and sight or demand drafts. Travelers' checks, money orders and other forms of non-commercial remittances come under this heading.

Long exchange includes all drafts with a currency of eight days or over, such as thirty and sixty-day commercial bills and bankers' long bills.

2. *Sight drafts.*—Checks and demand or sight drafts, whether drawn on a bank or a commercial house, have no days of grace for payment and must be paid on presentation, or protested. As a rule the sale of demand exchange is confined principally to banks, commercial drafts being usually drawn on time.

The rate or price of demand or sight exchange, under modern conditions, may be considered as the basic rate on which all rates for time exchange are calculated. The old usance or sixty-days' rate, obtaining between London and New York, on which rates used to be calculated is a relic of the days of slow-going sailing vessels. In practice, of course, given the rate of interest, the rates of exchange are quickly converted from one to the other. Under normal conditions, a sight draft drawn in New York or London will be presented and paid six to eight days after negotiation in New York, and is therefore, as regards time lost in transit, on a par with a shipment of gold. The difference between the export gold point and the demand rate is represented by the freight, insurance charges, etc., on the shipment of gold. It is, of course, necessary for banks transacting a regular foreign ex-

GUARANTY TRUST COMPANY
OF NEW YORK

EXCHANGE FOR
£.....*Stg.* *New York,* .....191....

On demand please pay.....

or order (Original being unpaid) the sum of..... *Sterling*
which charge to New York account
To .....
Guaranty Trust Company of New York,
33 Lombard Street,
No..... London. .....
MANAGER

FIGURE 12. DEMAND DRAFT

change business to maintain balances with the various foreign correspondents against which they can draw demand drafts and sell cable transfers. Funds for these balances are provided by remitting quantities of different kinds of exchange which have been purchased from customers and others. Demand and other short date items are credited immediately; acceptance is obtained of the longer date items which are discounted and credited by the correspondent as occasion requires.

The selling of demand exchange and cables against remittances of the same is the most elementary form of foreign exchange. A banker, for instance, purchases a demand draft on London for £10,000 at the current rate of exchange, say $4.86, and remits the bill to his London correspondent; at the same time he sells his own check or checks on London for the same amount at, say, $4.86½; the two transactions reach London by the same mail and offset each other. Apart from the expense of conducting his business, he clears $50 on the transaction and is not out of the use of his money for more than a few hours at the most. If the checks sold by the banker miss the mails by any chance, the banker has the use of the money in London until the mail is received; hence the importance of watching the mail service closely in exchange transactions. This illustration is, of course, elementary and bankers do not often make money this way; but it shows the principle on which foreign exchange transactions are based. Banks are constantly purchasing every kind of exchange and for-

THE CANADIAN BANK OF COMMERCE

Sherbrooke, Que. 10th November 1916 — £956–8–7

Sixty days after

sight of this FIRST of Exchange (Second unpaid) pay to the order of.....

The Canadian Bank of Commerce.....the sum of

Nine hundred and fifty-six pounds 8/7..... *Sterling,*

Value received, and charge the same to account of

To

Davis, Jones & Co.

18 Harbour St.

Liverpool.

Barclay & Dawson.

No. *B. E. 28*

FIGURE 13. SIXTY-DAY BILL (FIRST)

THE CANADIAN BANK OF COMMERCE

Sherbrooke, Que. 10th November 1916 — £956–8–7

Sixty days after

sight of this SECOND of Exchange (First unpaid) pay to the order of.....

The Canadian Bank of Commerce.....the sum of

Nine hundred and fifty-six pounds 8/7..... *Sterling,*

Value received, and charge the same to account of

To

Davis, Jones & Co.

18 Harbour St.

Liverpool.

Barclay & Dawson.

No. *B. E. 28*

FIGURE 13a. SIXTY-DAY BILL (SECOND)

warding it to their foreign correspondents by whom it is converted into an available balance. In any case there is constantly accumulating to the credit of the New York banker a balance against which he is able to sell exchange and cables and meet his maturing obligations. Under normal conditions, owing to the reliability of the mail service, a banker is able to estimate very closely the position of his London balance and as a rule receives a cable from his correspondent at the end of each day.

3. *Cable transfers.*—A cable transfer or "cable," as it is more generally called, is a transfer of funds by cable, no question of interest being involved as payment is immediate. Apart from this a "cable" differs from a check only in the fact that the banker abroad is told by a cable, instead of by a written order or check sent by mail, to pay out the money. The cable dispatches should be sent the night before, or early on the morning of the day on which payment is due; otherwise, owing to the difference of time between New York and London, the London bank will be closed and the payment delayed until the following day. As the money is received and paid on the same day, it is obvious that the banker must charge a higher rate of exchange for a cable than he would for a check, because he has the use of the amount of the latter while it is in transit. The mail time between the two points involved and the current interest rate at the paying point are the main factors which determine the difference in the rate of exchange between cables and

demand drafts. The higher the rate of interest and the slower the mail steamer, the more the quotations diverge. With a demand rate of exchange at $4.86, an eight-day steamer and a London market rate at 4⅞ per cent, the cable equivalent would be 4.8652, 4.86+.0052 (8 days' interest). These rates are rendered more or less divergent according to the supply of or demand for checks and cables respectively.

4. *Unusual rates for cables.*—It has already been noted that the outbreak of the European war raised cable rates on London to an unprecedented point. In his work on "International Exchange" Mr. A. W. Margraff summarizes the conditions which produce abnormal rates as follows:

1. Flurries on the New York Stock Exchange with the incidental abnormal high rates for money, frequently induce New York bankers to sell their checks on London for amounts largely in excess of their cash credit balances in the hands of their London bankers, and enables them to relieve the stringency of the money market and at the same time obtain a higher rate of interest by loaning the money realized in selling their London checks.

The manner of covering these checks prior to their presentation for payment in London is and can be effected only thru the purchase of cable transfers, and these operations when indulged in extensively, naturally create a brisk market demand for cable transfers, and fancy prices in many instances have to be paid.

2. Exceptionally high rates for London checks, caused by an unexpectedly heavy inquiry and a scant supply of commercial bills of exchange, might tempt the aggressive banker to avail himself of the high price by selling his checks on London short, basing his calculations on a decline in the

price of exchange, during the transit of his checks to a point where he can buy cable transfers in reimbursement for approximately the same rate he sold his checks, and in that event he would have had the free use of the proceeds of his sale of checks in the interim for loaning purposes.

Unforeseen circumstances often offset the calculations of the financier, and instead of the anticipated decline, the market has remained stationary or in fact had an advance and in the face of these conditions the many short sales of checks must still be covered by cable transfers at about any price the seller may dictate.

3. The fortnightly settlement days on the London Stock Exchange occurring about the middle and the end of each month influence also the price for cable transfers, and New York banking firms engaged in transactions in the London market frequently are called upon, especially in a wide and fluctuating market, to protect their operations by the cash payment on these days, of very large sums of money that are transferred by telegraph and result in a heavy demand for cable transfers.

4. There are many bankers not averse to having their foreign accounts show a debit balance at various times thruout the half-yearly account periods, and who thru a sentiment of pride and an implied request on the part of their European friends, always close their accounts on 30th June and 31st December with a liberal cash credit balance created in most cases at the last moment by the purchase of cable transfers.

The demand for cable transfers thru this source is sufficiently large to induce some bankers to establish large credit balances with their London friends during the months of June and December, thereby placing themselves in a position to sell cable transfers on 29th June and 30th December at the advanced prices which usually obtained then.

5. *Long exchange.*—Long-time drafts may be divided into bankers' long bills and commercial long bills; both classes are drawn at sixty or ninety days

after sight, except in special cases, when the time limit may be longer.

Commercial long bills with or without documents attached are drawn on foreign debtors by merchants and exporters against shipments of goods abroad; they are usually purchased by bankers who remit them to their foreign correspondents for collection and credit and sell their own bills against the balance so created.

When a bill of exchange is drawn for the exact value of the goods exported and has the bill of lading, insurance certificates, etc., attached, it is known as a "documentary" bill of exchange. It is accompanied by instructions attached to surrender the documents on payment (D/P) or on acceptance (D/A). If no documents are attached to a bill, it is known as a "clean" bill of exchange. Bankers' bills are invariably clean bills, while commercial bills, unless drawn by a house of high standing on another of equal rating, are usually documentary.

Bills of exchange and the accompanying documents are usually drawn in duplicate. The originals are forwarded on the first outgoing steamer, the duplicates are sent by the next mail. Sometimes the second bill of exchange is retained until a satisfactory sale can be made, in which case the maturity of the bill is based on the date that the first of exchange was accepted in London, accurately determined by the arrival of the mail boat. The second bill of exchange bears the name and address of the holder of the ac-

cepted bill. Before payment the duplicate is attached to the original. A bill of exchange may be taken up any number of times before it is due and be put into circulation between each payment, but once it is paid by the acceptor on its becoming due it cannot again be put into circulation.

6. *Influence of the interest rate.*—A bill drawn, say, on London at sixty days after sight is obviously not worth as much to the purchaser as a demand bill. He has to pay for a sixty-day bill on delivery, send it over to London, obtain acceptance, and wait sixty-three days after acceptance before the bill matures and is paid: in other words, there is sixty-three days difference between the currencies of a demand and a sixty-day bill. Should the purchaser find it inconvenient to await the maturity of the bill, he can instruct his correspondent in London to discount it at the current rate, and have the proceeds placed to his credit. In all exchange calculations, therefore, the rate of interest is based on the current rates obtaining in the country on which the bill is drawn; this rate varies slightly according to the nature of the bill. The rates applicable to various classes of bills are, roughly, as follows:

Clean bills drawn on bankers—private discount rate.

Clean bills drawn on first-class firms—¼% above private discount rate.

Bills, with documents deliverable on acceptance—¾% below Bank of England minimum discount rate.

Bills drawn at over sixty days sight, bear a higher rate of discount, as a rule, than the market rate for sixties, owing to the element of risk on account of the possible change in the discount rate during the currency of the bill. It is obvious that if the London rate of discount happens to be higher than the New York rate, the purchaser of a sixty-day bill would probably prefer to allow the bill to run to maturity rather than discount it in London and use the proceeds in New York. Conversely, if the London rate was the lower he would prefer to discount the bill and withdraw the proceeds for use in New York. From the foregoing it will be seen that the London rate has a powerful influence on the exchange market. The higher the rate of discount the greater the divergence between the rate of exchange on long and short bills on London. A change in the interest rates of either London or New York is immediately reflected in the price of any bill. The conversion of a demand rate to a sixty-day rate includes an allowance for interest and British revenue stamps (1 shilling per £100). With a demand rate of 4.87 and a private discount rate in London of 3½ per cent, a banker's clean bill is worth 4.8385 as the following calculation shows:

New York demand rate on London		$487.	per £100
less 63 days' interest at 3½% . .	2.93		
Stamp duty 1/20%	.24	3.17	
		$483.83	

or the nearest commercial rate, $4.8385 per pound sterling. Elsewhere it has been shown that exchange rates between two countries either correspond or tend to correspond; this applies, however, only to the demand rates.

7. *Commercial long bills.*—Commercial long bills are drafts drawn at thirty days or over by exporters on foreign customers, or upon banks abroad designated by the latter. A bill of this kind is usually accompanied by a bill of lading and other documents. Where a draft is drawn on a very good house abroad, or a bank, the documents are delivered upon the acceptance of the draft. Such drafts are known as "acceptance bills" or D/A.

Where the drawee's standing is less well-known or where the merchandise is perishable, documents are delivered only on actual payment of the drafts. These drafts are known as "payment bills" or D/P. In the case of a draft marked D/A, the drawee can obtain possession of the relative goods as soon as he, or the bank representing him, has accepted the draft. If the draft be marked D/P, the drawee must pay the draft (less a rebate for any unexpired time it has to run to maturity) before he can obtain the merchandise. When D/P bills are drawn against perishable goods they are invariably taken up "under rebate." Payment bills are not discountable, even after acceptance, as they are liable to be paid any time before maturity and must, therefore,

remain in the portfolio of the banker who presented them for acceptance. "Acceptance bills," on the other hand, become clean bills after acceptance, they are discountable in the London discount market and may change half a dozen times before maturity.

The purchase of documentary bills drawn by reliable firms is a fairly safe operation, the buyer being protected by the bill of lading which is indorsed to him, but judgment should be exercised as regards the financial standing of the drawer and drawee, especially in the case of "acceptance bills," and consideration should be given to the nature of the relative goods.

8. *Bankers' long bills.*—Drafts drawn at sixty and ninety days sight, on foreign correspondents by bankers in the United States and Canada, form an important factor in international exchange operations. These bills originate in the regular course of a foreign exchange business and are based on a variety of transactions. Many of them are thirty and sixty-day bills and are sold to customers of the bank, who prefer this method of remittance to that of purchasing demand drafts or cable transfers. Some arise from a desire to anticipate a change in the rate of exchange, while others represent purely financial transactions, such as placing a foreign loan in New York. These latter operations are explained in the chapter on Finance Bills.

9. *Bills of exchange that involve more or less risk.*

—Concerning the risk incurred in the purchase of documentary exchange, A. W. Margraff in his book "International Exchange" writes as follows:

Bills of exchange that may be purchased safely.—Bills accompanied by documents covering staple, non-perishable merchandise can be readily resold in the market where consigned in the event of forced sale by reason of non-acceptance or non-payment by the drawees of the appertaining bill, and the inability of drawers to reimburse the purchaser of the bill upon demand for the amount originally paid them, plus expenses.

The proceeds realized upon merchandise disposed of under forced sale would be applied on account of the amount of reimbursement demanded of drawers, and provided the merchandise was of the nature just referred to, would almost liquidate the purchaser's claim against the drawers, and the small balance still due to the purchaser may be recovered with little difficulty from the drawers. If, however, they have failed in the meantime, then the purchaser would have a creditor's claim for such balance against the insolvent drawers.

The possibility of such a loss is very remote in view of the fact that the majority of drawers of bills of exchange (exporters) have all refused bills, immediately referred to their own agents abroad for protection.

Staple and non-perishable merchandise includes flour and other manufactured cereals such as corn meal, oat meal, hominy, etc.; farming implements, canned meats, fresh meats and other provisions, when the fresh meats and provisions are shipped in refrigerator cars and vessels of modern type, and warehoused in cold-storage plants upon the arrival at destination, if not immediately taken up by drawees.

Bills involving more or less risk.—Bills accompanied by documents representing shipments of perishable merchandise, such as butter, cheese, fresh fruits, etc., that are liable to deterioration in quality, or to absolute loss, during transit.

Bills with documents showing collateral security of live cattle, horses or other live animals, necessitating the expense of help and feed during transit for the maintenance of life, as a refusal of such annexed bill would depreciate the value of the security, day by day, to the extent of such expense incurred.

In addition to the liability of drawers and indorsers, if any, purchasers of documentary bills are secured by the financial responsibility of the acceptors on and after acceptance until actual payment of the bills.

The liability of drawers continues after the acceptance of bills, remains in force during the whole life of the bills and ceases only upon payment.

The primary conditions of the desirability of the purchase of any bill of exchange depend upon the moral and financial standing of the parties thereto, and the liabilities just stated of the parties should be quite ample in the majority of cases. Further, these bills possess another element of protection against a possible loss in this, that they are supplemented by documents covering salable merchandise with title continuing in the purchaser of the bills until payment at maturity, or retirement prior to maturity, of the respective bills of exchange.

APPLICATION FOR COMMERCIAL CREDIT

New York,.....

GUARANTY TRUST COMPANY OF NEW YORK.

Dear Sirs.

Please issue for our account a Documentary Credit in favor of

.....

for £.....drafts at.....

against.....cost of shipment of.....

from .....to.....

In force until first day of.....

Insurance effected in.....

Kindly advise the Credit by

CABLE

MAIL

Yours truly, ..

FIGURE 14.

Credit No.....
£.....Sterling

GUARANTY TRUST COMPANY OF NEW YORK

New York,.....19..

To the GUARANTY TRUST COMPANY OF NEW YORK,
33 LOMBARD STREET,
LONDON.

Gentlemen:

At the request and for account of..... we hereby authorize..... or any parties whose drafts you may be directed by....written order, or by us, to accept under this credit, to value on you at.....for any sum or sums not exceeding in all..... Pounds Sterling (say £.....Sterling) to be used as.....may direct for.....invoice cost of..... to be purchased for account of..... and to be shipped to a.....port in the United States.....

The Bills must be drawn in..... .....prior to the first day of..... and advice thereof given to you in original and duplicate, such advice to be accompanied by Bill of Lading filled up to order of the Guaranty Trust Company of New York (with copy of invoice) for the property shipped as above.

All the Bills of Lading issued, except one sent to us by the vessel carrying the cargo, and one retained by the captain of the said vessel, are to be forwarded direct to you. Copy of invoice, properly certified by the U. S. Consul to be forwarded to us by the vessel, also advice of each Bill drawn.

And we hereby agree with the drawers, endorsers, and bona fide holders of Bills drawn under and in compliance with this credit, that the same shall be duly honored on presentation at your office in London.

We are, Gentlemen,
Your obedient servants,
Guaranty Trust Company of New York,
by

.....
Manager.

N. B. Bills drawn under this credit must be marked Drawn under Guaranty Trust Company of New York Letter of Credit No.....dated..... for £.....

Insurance in order at.....

FIGURE 15.

New York,.....191..

To the

GUARANTY TRUST COMPANY OF NEW YORK

Gentlemen:

Having received from you the Letter of Credit of which a true copy is on the other side, $\frac{I}{we}$ *hereby agree to its terms, and in consideration thereof* $\frac{I}{we}$ *agree with you to provide in New York, twelve days previous to the Maturity of the Bills drawn in virtue thereof, sufficient funds in cash, or in Bills on London, satisfactory to you, at not exceeding sixty days' sight, and endorsed by* $\frac{me}{}$*, to meet the payment of the same with .....per cent commission and interest as hereinafter provided, and* $\frac{I}{we}$ *undertake to insure at* $\frac{my}{our}$ *expense, for your benefit, against risk of Fire or Sea, all property purchased or shipped pursuant to said Letter of Credit, in Companies satisfactory to you.*

$\frac{I}{we}$ *agree that the title to all property which shall be purchased or shipped under the said credit, the bills of lading thereof, the policies of insurance thereon and the whole of the proceeds thereof, shall be and remain in you until the payment of the bills referred to and of all sums that may be due or that become due on said bills or otherwise, and until the payment of any and all other indebtedness and liability now existing or now or hereafter created or incurred by* $\frac{me}{us}$ *to you on any and all other transactions now or hereafter had with you, with authority to take possession of the same and to dispose thereof at your discretion for your reimbursement as aforesaid, at public or private sale, without demand or notice, and to charge all expenses, including commission for sale and guarantee.*

Should the market value of said merchandise in New York, either before or after its arrival, fall so that the net proceeds thereof (all expenses, freight, duties, etc., being deducted) would be insufficient to cover your advances there against with commission and interest, $\frac{I}{we}$ *further agree to give you on demand any further security you may require, and in default thereof you shall be entitled to sell said merchandise forthwith, or to sell "to arrive," irrespective of the maturity of the acceptances under this Credit,* $\frac{I}{we}$ *being held responsible to you for any deficit, which* $\frac{I}{we}$ *bind and oblige* $\frac{myself}{ourselves}$ *to pay you in cash on demand.*

It is understood that in all payments made by $\frac{me}{us}$ *to you in the United States, the Pound Sterling shall be calculated at the current rate of exchange for Bankers Bills in New York on London, existing at the*

FIGURE 16.

time of settlement, and that interest shall be charged at the rate of five per cent per annum, or at the current Bank of England rate in London if above five per cent.

Should $\frac{I}{we}$ *anticipate the payment of any portion of the amount payable, interest is to be allowed at a rate of one per cent under the current Bank of England rate.*

In case $\frac{I}{we}$ *should hereafter desire to have this credit confirmed, altered or extended by cable (which will be at* $\frac{my}{our}$ *expense and risk),* $\frac{I}{we}$ *hereby agree to hold you harmless and free from responsibility from errors in cabling, whether on the part of yourselves or your Agents, here or elsewhere, or on the part of the cable companies.*

This obligation is to continue in force, and to be applicable to all transactions, notwithstanding any change in the composition of the firm or firms, parties to this contract or in the user of this credit, whether such change shall arise from the accession of one or more new partners, or from the death or secession of any partner or partners.

It is understood and agreed that if the documents representing the property for which the said Credit has been issued are surrendered under a trust receipt, collateral security satisfactory to the Company, such as stocks, bonds, warehouse receipts or other security, shall be given to the Company, to be held until the terms of the credit have been fully satisfied, and subject in every respect to the conditions of this agreement.

It is further understood and agreed in the event of any suspension, or failure, or assignment for the benefit of creditors on $\frac{my}{our}$ *part, or of the nonpayment at maturity of any acceptance made by* $\frac{me}{us}$*, or of the nonfulfillment of any obligation under said credit or under any other credit issued by the Guaranty Trust Company of New York on* $\frac{my}{our}$ *account, or of any indebtedness or liability on* $\frac{my}{our}$ *part to you, all obligations, acceptances, indebtedness and liabilities whatsoever shall thereupon, at your option then or thereafter exercised, without notice, mature and become due and payable.*

FIGURE 16. (*Continuation*)

10. *Letters of credit.*—There are two well-known forms of letters of credit:

1. Circular letters of credit, to be used by travelers and tourists. These are addressed to the foreign correspondent of the issuing bank in favor of the holder.

2. Commercial letters of credit, to be used in trade. These take the form of a letter addressed by a bank to a foreign

merchant, authorizing him to draw on the issuing bank's correspondent in a certain place (generally a financial center such as London or New York) for a specified amount representing the cost price of certain goods ordered by the bank's customer, on whose behalf the credit is issued. The letter designates a time-limit and specifies that all drafts shall be accompanied by the relative invoice, bill of lading, insurance policy, consular certificate, etc.

Before issuing a commercial letter of credit the bank requires the customer to sign an application form (Fig. 14 on page 103) setting forth the particulars and terms of the shipment and giving instruction in regard to terms, insurance, etc., all of which are embodied in the letter of credit, which is issued by the bank in four parts, namely, one original and three copies (these copies however vary but slightly from the original).

1. The original is addressed to the foreign merchants in whose favor the credit is issued (Fig. 15). This is handed to the customer, who forwards it to his correspondent.

2. A copy is addressed to the London or New York bank on which the credit is issued, authorizing it to protect the drafts against the credit when drawn in accordance with the terms and conditions thereof.

3. A copy of the original is delivered to the customer for his files.

4. A copy is retained by the bank issuing the credit.

On the reverse side of the last two copies is a receipt, signed by the customer, incorporating an agreement regarding the basis on which the bank is to be reimbursed, and the amount of its commission (which varies according to the currency of the bill drawn).

The bank's rights in case of default in payment or other difficulties is also defined (Fig. 16).

Commercial letters of credit are invaluable factors, and in the promotion of international trade and commerce greatly facilitate the negotiation of bills of exchange, not only in the import business of a country but also in the export business. Letters of credit, tho not themselves negotiable, render valuable service to commerce by facilitating the drawing and negotiation of bills of exchange thruout the world. These two phases are dealt with fully in later chapters.

REVIEW

What are the two classes of bills of exchange and what does each include?

How does a cable transfer differ from a check? Why are higher rates of exchange charged for it than for a check? What are the main factors which determine the difference in exchange rates between cable transfers and demand drafts?

What conditions will tend to produce abnormal cable rates? Discuss.

What are: (a) commercial long bills; (b) documentary bills of exchange; (c) clean bills of exchange? Give an illustration of a clean bill and of a documentary bill.

Describe the kind of bills of exchange which are considered safe to buy and those which involve risk. What are the primary conditions which make the purchase of a bill of exchange desirable?

CHAPTER VII

A DAY IN AN EXCHANGE BOX

1. *Practical exchange.*—A very practical way to obtain an insight into foreign exchange is to study actual counter operations.

We have already seen how the rates are obtained from New York. Therefore, in our operations, we shall use the quotations given and consider them as the cost price to us of the various exchanges.

	Bulletin:	Buying:	Selling:
London			
Cable	4.8575		4.8725
Demand	4.8525	4.825	4.87
60–days	4.8200	4.810	
Commercial Bankers	4.8225		
Paris			
Checks	5.20⅝ — 1/32		5.19⅞
Checks	19.20 cts.		19.30 cts.
Berlin	94 11/16		94⅞
Hong Kong	49		49.20

In the examples which follow, the allowance made for profit is nominal and the explanations necessarily brief; hence reference should be made to the more detailed information given in later chapters.

In practice, the conversions are, of course, arrived at by the use of exchange tables, but the actual work-

ing of conversion will be shown in the examples here given.

2. *Demand sterling sold.*—Our first customer is Mr. Bryant, who wants to send £420 to London. We quote him 4.87 and ask him to fill up and sign a requisition form. This form should be used in connection with the sale of every kind of draft, foreign or domestic, as it eliminates the risk of misspelling names and of making other similar errors.

In filling out a sterling draft, great care should be taken to avoid wide spacing. The figures should be made very clear. The amount, commencing at the extreme left, should be written on a single line if possible. Shillings and pence, if there are any, should be written in full. Fractions of a penny should not be used. In England, checks are commonly written with the shilling sign (/); thus 7/2 means seven shillings and two pence, but the former method is safer.

By the exchange tables we find that Mr. Bryant must give us a check for $2,045.40.

Conversion: $420 \times 4.87 = 2{,}045.40$.

Mr. Meyers, a lawyer, now makes a requisition for the equivalent of $1,000, the amount of a legacy he has to remit to England, for which we give him a draft for £205–9–7, at $4.86\frac{2}{3}$.

Conversion: $\frac{1{,}000}{4.86\frac{2}{3}} = 205.48$ or in money £205.9s7d.

Mr. Meyers has also to cable £1,000 to one of his clients in London, for which we require explicit instructions on the requisition regarding the name and address of the payee, and similar items. We charge at the rate of $4.8725 per pound sterling and, in addition, the cost of the cable message, $2.00; the total is $4,874.50. Care should be taken in coding the cable, which should be checked by another officer.

The message, in plain English, not in code, should be forwarded to the London correspondent.

3. *Sterling purchased.*—Mrs. Ellen Smith brings in a crossed check [1] for £180, which we place to her credit at 4.82½ realizing $868.50. The check is payable to the order of Mrs. John Smith, and as the English banks are very particular about the indorsement's being exactly the same as that on the face of the check, we ask Mrs. Smith to sign it "Ellen Smith, wife of John Smith." If it is payable to Mrs. Ellen Smith it should be indorsed "Ellen Smith," the "Mrs." being disregarded. Indorsements on foreign checks or

[1] A check is crossed by drawing two parallel transverse lines across its face, with or without the words "and Co." This constitutes a "general crossing" and the bank on whom it is drawn must pay it only thru another bank, or receive it on deposit direct from the payee. If the name of a particular bank is written between the lines, the check is "crossed specially" and can only be paid thru and to that bank. If the holder of a crossed check is a customer of the drawee bank, the latter need not pay cash, but may credit the customer's account, and the customer can withdraw the amount by check if he so desires.

The crossed check is not used in Canada or the United States, tho it is authorized in Canada by the Bills of Exchange Act (Sec. 165–175). In England, however, where identification is not so strictly enforced by the banks, the object of crossing checks is to prevent their being paid to the wrong holders.

drafts should always be written, never stamped.

Sangster and Company, produce dealers, offer a 60 days sight draft, with documents attached, for £2,000 against a shipment of cheese to be surrendered on payment (D/P). We place the sum of £2,000 to their credit, after seeing that all the papers are in order and properly indorsed. Since the rate given is $4.81, they realize $9,620.

Attached to the draft, which is made out in duplicate, are:—

Marine bill of lading (in duplicate).
Certificate of insurance for £2,150.
Letter of hypothecation.[1]

Before mailing, we indorse by written signature all documents to the order of our London correspondent. The duplicate draft and bill of lading are sent by the next mail.

4. *French exchange.*—The first customer for French exchange wants a draft for fcs. 300.25. We sell to him at .1930 and receive $57.95. (These rates advance by hundredths of a cent.)

We are careful to write out the date in words, for

[1] A letter of hypothecation is a certificate attached to a documentary bill of exchange and signed by the drawer. It describes the nature of the shipment, etc., and states in effect (1) that the bill of lading is lodged as collateral security for the acceptance and payment of the draft, (2) that in case of dishonor the holder is authorized to dispose of the goods and apply the proceeds toward payment of the draft and the expenses incurred, (3) that the drawer holds himself liable for any deficiency, and agrees to pay same on demand. When an exporter sells a number of bills of exchange to a bank, a general, or blanket, hypothecation certificate is given to apply to any and all bills of exchange purchased from him.

otherwise a check would be treated as a bill and taxed accordingly.

The body is filled in as in dollar checks, and the memorandum reads fcs. 300.25.

The next requisition is for a draft on Paris for fcs. 5,000 at 5.19⅜. When francs are quoted this way, so many francs for one dollar, we decrease the rate in selling; in other words, we buy high and sell low. Paris funds cost us 5.20 ⅜–1/32 or 960.08 for fcs. 5,000; if we sell at 5.19⅜ we shall receive $962.69, making a profit of $2.61.

If we quoted 5.20 we should receive $961.53, a profit of $2.05.

$$\text{Conversion } \frac{5{,}000}{5.19\frac{3}{8}} = \$962.69.$$

A decrease in the rate ⅜ centimes corresponds to a profit of ⅛ of one per cent on the dollar amount.

5. *German exchange.*—Mr. Jenkins wants to send 1,000 marks to his daughter in Berlin, for which we charge him $237.19, at the rate of 94⅞ cents per 4 marks.

Conversion: $\frac{.94875}{4} = .2371875$ the value of one mark in cents, or $237.19 for 1,000 marks. The draft should be filled out in marks, and odd pfennigs should be avoided. See that the draft reads pay "out of money at our credit" or "out of balance," or that there are words to that effect, since otherwise it will be subject, as are bills of exchange, to stamp taxes of 1/20 of one per cent.

German exchange is also quoted at so many cents

to the mark, advancing by steps of .01 cent, 24.01, 24.02, etc., and a fluctuation of .01 cent means about 42 cents on $1,000. The conversion requires no explanation. An advance of ⅛ cent per 4 marks corresponds roughly to ⅛ of one per cent on the dollar amounts.

6. *Sundry drafts.*—Won Lung, who, by the way, is a very close figurer on exchange rates, wants a draft on Hongkong for $100 local currency, for which we quote him $49.20 for each Mexican or, as it is called, local-currency dollar. His draft, therefore, costs him $49.20. In making out the draft on Hongkong, "One hundred dollars Local Currency" (the use of "cents" should be avoided if possible) should be written in the body of the draft. Drafts on Hongkong are generally made out to bearer; so that the remitter runs considerable risk in using them.

If Won Lung had asked for the equivalent of $100 in local currency he would have received a draft for

$$\text{Loc. Cur. } \$203.25 \text{ or } \frac{100}{.4920}$$

Belgium, Switzerland and Italy are members of the Latin Union, and their monetary system and quotations are similar to that of France, with the exception that the franc is called the lira (plural lire) in Italy. There is very little demand for drafts on other countries of Europe, and such demand is only for small amounts for individual use. Large transactions are settled by means of drafts on the big centers—London, Paris and Berlin—and exchange

on these points generally commands a premium in other European cities.

7. *Travelers' checks.*—The next customer is Mr. Brown, who intends to visit Europe and who asks us to arrange his finances for the trip. He requires a letter of credit for £1,000, travelers' checks for $500 and £10 in sovereigns.

Travelers' checks, altho sold and payable in dollars (in denominations of $100, $50, $20 and $10) are also payable in the principal foreign countries for the full fixed amounts in foreign currencies printed on the face of the checks; there is no deduction for commission. In those colonies which use the same currency as their mother countries, the checks are payable at the current rate for purchasing exchange on the capitals of the respective mother countries.

Travelers' checks may be cashed practically anywhere. They are self-identifying and easily negotiated. Mr. Brown pays $502.50 (½ of one per cent commission) and receives:

1. A book of checks of the denominations he requires.
2. A list of correspondents, hotels, etc., that will cash the checks.
3. A letter of identification, which he signs in our presence and which is used by the correspondents for comparison with the signatures on the checks when he obtains the cash. This letter also contains the numbers and amounts of the checks.

Some banks do not use a letter of identification, but require a signature of the customer to be placed on each check before issue. Thus every check carries

its own identification but the risk is greater than when the letter is used.

8. *Issue of a letter of credit.*—We now come to the circular letter of credit and give Mr. Brown:

1. The letter itself for £1,000.
2. A letter of indication bearing his signature.
3. A list of correspondents from whom money may be drawn.

Mr. Brown signs an agreement that any check drawn by him against the credit shall be charged to his account at the current rate of exchange of the day when presented to us for redemption, plus a commission of one per cent. If the customer is of high financial standing this agreement will be sufficient, since there will always be funds in his account with which to meet the withdrawals; if he is not of high standing, financially, cash or securities to the amount of the liability must be deposited.

9. *Payment on letter of credit.*—Our next visitor is Mr. Jackson, from London, England, bearing a letter of credit from one of our correspondents. He presents his letter for £500 and a letter of indication, with a request for £10. We see that the letter is in form in regard to dates, etc., compare it with the sample form and signatures of our correspondent on file, and add up the indorsements to see that there is a sufficient balance to meet the proposed withdrawal. Everything being in order we—

1. Carefully indorse on the back of the letter the date and amount withdrawn and sign our own name.

2. We fill in a sterling draft, which Mr. Jackson signs, for the amount, in strict accordance with the instructions contained in the body of the letter of credit.

3. We then pay Mr. Jackson the equivalent of £10 at the rate of the day, say $48.20.

Letters of credit are sometimes fraudulent and great care should be taken in comparing them with the original copy and signatures. In the hands of private individuals they are intended only to provide funds for use in traveling from place to place, and any withdrawal of an unusual proportion of the face amount should be viewed with suspicion, unless some satisfactory explanation, such as the purchase of tickets for the homeward journey, can be given. The letter-of-credit form should be attached to the final draft when the withdrawal exhausts the credit.

Our customer, Mr. Brown, in using his letter of credit in foreign countries, will be treated as Mr. Jackson was.

10. *Payment of a travelers' check.*—We next have presented to us a travelers' check for $100. We ask for the letter of indication and request that the check be signed in our presence by the holder. After comparison of the signature and number of the check with the letter of indication we pay the exact amount of the check, $100. By arrangement with the issuing bank, for our trouble, we are entitled to 10 cents, which we add to the check. We then forward the item for redemption as $100.10.

11. *Commercial letters of credit.*—Rogers and

Barclay, tea merchants, next apply for a commercial letter of credit on London for £10,000 in favor of Williamson Brothers, Colombo, Ceylon, tea merchants. The first thing to determine is Rogers and Barclay's financial standing and business experience. It is true that any transactions against letters of credit are protected by bills of lading and insurance, but it must be remembered that there are many risks in the import business, especially when the distance involved is great, in the way of shrinkage in market value, loss in weight and depreciation.

If the financial standing of Rogers and Barclay is satisfactory we ask them to sign an application for a commercial letter of credit setting forth the particulars and terms of the shipment and giving instructions in regard to insurance, etc., all of which are embodied in the letter of credit addressed to Williamson Brothers. This letter, with instructions, is handed to Rogers and Barclay to be forwarded, and they in return give us a receipt in which is incorporated an agreement regarding the basis on which the bank is to be reimbursed, the amount of its commission (which varies according to the currency of the bills drawn) and a statement of the bank's rights in case of default in payment or other difficulties.

The letter of advice is forwarded to our London correspondents, and a copy is retained for our files. It does not necessarily follow that all the money represented by the letter of credit will be used at one time. There may be one shipment or more, but no matter

how many there are they must all be made within the time limit mentioned in the letter.

REVIEW

If you were asked to make out a draft on London, enumerate the various steps you would take in so doing.

In selling French exchange explain the various operations required.

How would you make out a draft on Berlin?

What are the advantages of travelers' checks?

What instruments are issued with a circular letter of credit? How would you proceed in paying one?

If a business house applied to you for a commercial letter of credit, what steps would you take before issuing it?

CHAPTER VIII

FOREIGN EXCHANGE AND EXPORTS

1. *Interdependence of exports and imports.*—If merchandise were the only basis of international indebtedness the value of the exports would have to be equal to that of the imports or else trade would practically cease. Suppose a country which does not itself produce gold, has an excess of imports, for which it could pay only by shipping gold. To a limited extent this could be done, but its supply of gold would soon be exhausted and the only way to replenish it would be to reduce the amount of imports below that of its exports. Furthermore, the loss of gold from a country induces a fall in the price of goods and a rise in the price of money, and, owing to the depletion of the bank reserves, a rise in interest follows. It would, therefore, become a good country to buy from, and a poor country to sell to. Automatically, exports would be stimulated and imports checked until the balance was reversed. In practice, however, the exports of a country are not confined to merchandise but include other elements known as "invisible exports," which offset the imports of merchandise. "Visible exports" consist of merchandise of every description, including gold; they are so called because accurate records of all goods and specie entering or

leaving a country are kept by the customs and port authorities. Every vessel clearing from a port must declare its cargo before leaving, and all goods entering the country are examined and valued at the custom house. This system affords a fairly accurate record of the visible exports and imports of a country. A country's "invisible" foreign trade is so called because no such record is available owing to its nature. It consists of the import and export of services, of bonds, shares and other evidences of indebtedness and, not being the subject of government supervision, there is no certain method of ascertaining the amount and volume of these transactions. For that reason they can only be roughly estimated.

The disparity between the visible exports and the visible imports of the principal countries of the world for the year ending December 31, 1913, which represents normal trade conditions, will demonstrate the importance played by the invisible exports and the invisible imports in adjusting the balances of payments among the countries of the world.

	Imports (Last six ciphers omitted)	Exports (Last six ciphers omitted)
Great Britain	$3,080	$2,371
Germany	2,545	2,132
United States	1,717	2,311
France	1,589	1,296
Austria	726	591
Canada	670	356
Russia	603	782
Denmark	215	156
Sweden	185	177

	Imports	Exports
	(Last six ciphers omitted)	
Netherlands	144	188
Norway	141	87

It will be noted that the imports of the above countries, with the exception of those of the United States, Russia and the Netherlands, exceed the "visible" exports; the difference is adjusted by "invisible" exports. Such excess of visible imports does not necessarily place a country at a disadvantage, for in the case of the older countries goods are imported in payment of services (such as freight and insurance) or for interest on foreign investments. In the case of a young country like Canada, however, the excess of imports consists of goods purchased with money borrowed abroad for capital expenditure, such as material for railways, factories and public works.

2. *Origin and supply of foreign exchange.*—Altho the export and import of merchandise are the basic factors of international indebtedness, there are other elements to be taken into consideration which have a precisely similar effect on the balances of indebtedness, and which can therefore be expressed in terms of exports and imports. Briefly speaking, trade between two countries consists of mutual exchanges of:

1. Merchandise
2. Gold
3. Services
4. Evidences of indebtedness.

For the sake of simplicity we generally consider that one country, say, the United States, trades with another country, England, just as if a statement of ac-

count were made out daily and the relative balance arrived at and settled. Such, of course, is not the case; the transactions occur among a multitude of independent merchants and bankers, whose bills of exchange on one another furnish the supply of, and govern the demand for, foreign exchange, and thus affect the price of exchange between the two countries in question. Bankers and exchange brokers in New York and London encourage the public to utilize their services for paying debts abroad, and in order that they may do this, also encourage those who have claims against persons abroad to sell these claims to the banks in the form of bills of exchange, thus enabling the banks to offset sales against purchases. In other words, the banks are both buyers and sellers of foreign exchange. A continuous process of assembling and distributing exchange is thus effected thru the agencies of banks, which act as clearing houses, and eventually make a settlement between the financial centers of the two countries. Should New York banks, for instance, be called upon for more exchange on London than they are able to buy, they must provide funds to meet their withdrawals by exporting gold or by some other means. As a rule, gold shipments are avoided as much as possible and the required balance in London is often created by:

1. Buying exchange on other centers and sending to London for credit.
2. Shipping securities to London to be sold or borrowed against.
3. Using finance bills.

These are the principal methods resorted to in an endeavor to adjust an excess of imports over exports; if in spite of these the balance of payments remains adverse, gold is shipped.

3. *"The United States in account with the world."* —The exports of one country form the imports of another, and a study of the foreign trade of different countries will show that the component items of the exports and imports vary only in degree. Dean Joseph French Johnson in "Money and Currency" gives this statement of "The United States in Account with the World," the headings of which are comprehensive and self-explanatory and call for very little comment.

The exports of merchandise exceed the imports for the year under consideration (1904), as they did in 1913, and the difference was adjusted by the "invisible imports." The statement shows that gold was both exported and imported, indicating that in the course of the year it was found necessary to import gold to correct a falling rate and to export gold to adjust a rising rate. In these days of efficiency the necessity of shipping gold, with the attendant risk and expense, is a crude expedient and could easily be obviated by the use of some form of international gold certificate.

The invisible exports and imports can be considered under broader classifications as net balances offsetting the excess of visible exports, as shown in the following statement:

THE UNITED STATES IN ACCOUNT WITH THE WORLD (1904)

(In Millions of Dollars)

Exports — Which make the Supply of Foreign Exchange	Cr.
Visible Exports:	
1. Merchandise	1502
2. Gold	121
Invisible Exports:	
3. Stocks and bonds bought in the U. S. by foreigners (arbitrage included)	500
4. Other investments by foreigners in the U. S.	30
5. Interest and dividends on foreign securities owned by Americans	15
6. Profits by Americans on investments in foreign countries	10
7. Reduction of American bank balances abroad	..
8. Increase of foreign bank balances in the U. S.	..
9. Foreign tourists in the U. S.	15
10. Foreign embassies, consulates, etc., in the U. S.	3
11. Ocean freight paid to Americans by foreigners	..
Extraordinary:	
12. Indemnities, subsidies from foreigners, or sales of public property to foreigners	..
Total export credits	2196

Imports — Which cause the Demand for Foreign Exchange	Dr.
Visible Imports:	
1. Merchandise	1062
2. Gold	85
Invisible Imports:	
3. Stocks and bonds bought in foreign markets by Americans (arbitrage included)	616
4. Other investments by Americans in foreign countries	20
5. Interest and dividends on American securities owned by foreigners	50
6. Profits by foreigners from other investments in the U. S.	10
7. Increase of American bank balances abroad	5
8. Reduction of foreign bank balances in the U. S.	10
9. American tourists abroad	100
9a. Americans living abroad and drawing incomes from the U. S.	65
10. American embassies, consulates, etc., abroad	3
11. Ocean freights paid by Americans to foreigners	100
12. Payment to foreigners on account of indemnities, subsidies, purchases of public property, etc. (Panama Canal)	50
Total import debits	2196

Excess of visible exports:	
Merchandise	$440,000,000
Gold	30,000,000
Total excess of exports	$476,000,000
Excess of invisible imports:	
Investments (3 and 4)	$106,000,000
Interest and profits (5 and 6)	55,000,000
Tourists and embassies (9 and 10)	150,000,000
Ocean freight (11)	100,000,000
Special transactions (12)	50,000,000
Balance due by foreign banks (7 and 8)	15,000,000
	$476,000,000

The above statement shows that the United States paid $305,000,000 in goods for interest and services, took over $156,000,000 in investments, and still had a credit balance of $15,000,000 in foreign banks.

There is a very active exchange of stocks and bonds between New York and Europe. The volume of business is governed chiefly by the market rate of interest and the opportunity offered for arbitrage transactions at the various financial centers.

European investors have, from time to time, supplied large amounts of capital for the exploitation of business industries and utilities in the United States, and the interest on these investments consequently forms an item that offsets goods exported. The large number of Americans traveling abroad calls for a steady supply of exchange in the form of letters of credit and travelers' checks and tho, for the time being, the war has practically ended the demand

for such exchange, it will probably be greater than ever after peace is concluded. Owing to the lack of a merchant marine the United States pays a heavy toll to foreign countries for freight, as practically all of her exports and imports are carried in foreign bottoms. Mention of finance bills is omitted because, being merely a temporary expedient of sixty to ninety days currency, they have no place in a statement of this nature. They are used principally between seasons to anticipate a favorable change in the exchange rate and are, as a rule, absorbed by the balances created in Europe by the fall shipments of cotton and wheat.

A study of the following average quotations for the successive months of the years 1906–10 [1] shows that exchange is in favor of London during the first eight months of the year and in favor of New York during the last four months, and for this reason there are practically few bills of this nature outstanding at the end of the year.

January	4.872
February	4.875
March	4.8725
April	4.8715
May	4.875
June	4.876
July	4.872
August	4.8685
September	4.866

[1] Compiled by Mr. Lawrence M. Marks, and published in "International Trade and Exchange" by H. G. Brown.

October	4.8665
November	4.8695
December	4.869

4. *Commercial bills of exchange.*—While, as we have seen, the movement of merchandise is not the exclusive factor in the commercial relations of nations, which give rise to transactions in foreign exchange, none the less in the balance which has been studied they are the dominant element. The transactions which arise from them are therefore worthy of especial attention. It has already been noted that in the adjustment of commercial accounts, bills of exchange are drawn with documents attached. The chief of these documents is, of course, the bill of lading, to which the others, consular, certificate, insurance certificate and letter of hypothecation are subsidiary. The nature of these documents needs no detailed explanation here, as the form and purpose of most of them have been fully explained in the Modern Business Text on "Foreign Trade and Shipping," while the object of the letter of hypothecation has been referred to in Chapter VII, Section 3 note.

The method of using the commercial bill of exchange can be most conveniently explained by means of a concrete example. Suppose a cotton merchant in New Orleans sells one thousand bales of cotton to a Liverpool firm against draft with documents attached. The merchant draws a sixty-days draft in duplicate for the amount of the invoiced goods, say £10,000, and takes it, with the relative documents

attached, to his banker in New Orleans, who credits him with $48,500 at the rate of the day ($4.85). The merchant has sold his cotton, received his money and is ready for a new transaction.

The New Orleans bank sends the original bill and documents to its London correspondent, the duplicates following by the next mail. What happens in London to the bill depends upon its nature and whether the documents are to be surrendered on payment or on acceptance. (See Chapter VI, Section 5.) If the documents are to be delivered on acceptance, the bill becomes a "clean" bill and can be discounted in the London discount market and the proceeds placed to the credit of the New Orleans bank. If the documents are deliverable on payment only, acceptance of the bill is obtained, but the document remains attached to the bill until maturity, unless the acceptor takes up the draft under a rebate of interest for the unexpired time.

In the case of an "acceptance" bill, the proceeds become available as soon as the bill can be accepted and discounted. In the case of a "payment" bill the American banker cannot count on having the amount available until the maturity of the bill, tho prepayment under rebate may place the funds to his credit long before that time. If the New Orleans bank has no London correspondent it would sell the draft to its New York correspondent, who would remit it to London in due course. All obligants on these bills remain liable until payment.

5. *Financing exports by means of dollar credits.*— Every shipment of merchandise to a foreign country involves an operation in foreign exchange, but it does not necessarily follow that the exporter must understand all about foreign exchange in order to do a successful export business. Many goods are exported against dollar credits opened with some New York bank, and the exporter has a simple dollar transaction on his hands. Even when the credit is opened in London in pounds sterling the transaction offers no very difficult problem in exchange.

There is always a risk incurred in purchasing documentary exchange, unless it is supported by satisfactory names, and is drawn against staple and non-perishable merchandise. We shall consider a case in which an American exporter, say Mr. Brown, of Baltimore, is not satisfied with the standing of his foreign customer. He is unwilling to risk a shipment against unsupported documents and advises the purchaser to arrange a credit in New York in dollars for the amount of the invoiced goods, to be paid on delivery of the bill of lading and relative documents. The buyer, say in Paris, goes to his banker, specifies the amount and the terms of the credit required, and the banker writes or cables to his New York correspondent to open a credit for so many dollars in favor of Brown. In this credit are set forth the terms in which Brown is to be allowed to draw the money, and the various documents which are to accompany the drafts. In due course Brown is notified that the

credit has been opened. Accordingly, he draws a draft on New York and deposits it in his local bank. The draft is paid within a few days and, as far as Brown is concerned, the transaction is closed.

The New York bank having paid the draft and taken over the documents forwards them, debiting its Paris correspondent who opened the credit. If the customer of the Paris bank is of high financial standing the bank will probably turn over the documents to him at once, even before full payment is made. Otherwise the goods will be stored by the bank on their arrival and released when payment is received. This is purely a matter of arrangement between the Paris bank and its customer and does not concern the American exporter or banks. The Paris bank might perhaps have been unable to arrange a dollar credit on New York and so issued instead, a credit on London in pounds sterling against either time or demand drafts with documents attached. An explanation of the procedure in this connection with a history of the bill, is given in the next chapter.

6. *Dollar acceptances.*—Until the establishment of the Federal Reserve banks, American foreign trade had been financed chiefly thru the medium of letters of credit issued on London banks. The reason for establishing a credit in London, and thereby providing an English acceptance, was no reflection on the high standing of the New York banks; it was due to provisions of the National Bank Act, which prohibit national banks from doing an acceptance business.

Furthermore, the absence of an open discount market in New York was another serious obstacle in the free movement of foreign credit. This inability to finance foreign trade, except thru London, has proved a serious handicap to the United States in its exchange relations with other countries. Spain, for instance, could never settle in dollars for imports from the United States because her imports from that country were paid for by credits opened in London, and these in turn had to be utilized to pay for credits opened in London in favor of the United States.

Mr. Laurence Merton Jacobs in "Bank Acceptances" [1] refers to this feature as follows:

As a result of the inability of our banks to finance imports thru the acceptance of time bills, American importers are, then, made dependent to a large extent upon London, and are required to pay London a considerable annual tribute in the way of acceptance commissions. This practice not only adds to the importance of London and militates against the development of New York as a financial center, but it at the same time works serious injury to our export trade. Since time bills cannot be drawn on our banks from foreign points against shipments of goods to the United States, there are consequently in such foreign countries very few bills which can be purchased for remittance to the United States in payment for goods which have been bought here. In other words, under our present banking system our imports do not create a supply of exchange on New York, for example, which can be sold in foreign countries to those who have payments to make in New York. This means that our exporters are also, to their great disadvantage, made dependent upon London. It means that when they are ship-

[1] Publications of the National Monetary Commission, Document 569.

ping goods to South America and to the Orient they cannot, when they are subject to competition, advantageously bill them in United States dollars. They, naturally, do not care to value their goods in local currency—that is, in the money of the country to which the goods are going—so their only alternative is to value them in francs or marks or sterling, preferably the latter, owing to the distribution and extent of British trade, creating thruout the world, as it does under the English banking system, a fairly constant supply of and demand for exchange on London. When we come to bill our goods in sterling, however, it is at once seen that our exporters are obliged to take a risk of exchange, which is a serious handicap when competing with British exporters. Our exporters who are to receive payment for their goods in sterling must previously decide on what rate of exchange will make the transaction profitable. If, in an effort to safeguard themselves against a loss in exchange, they calculate on too low a rate for the ultimate conversion of their sterling into dollars, their prices become unfavorable compared to those made by British exporters and they lose the business. If they do not calculate on a sufficiently low rate they get the business but lose money on the transaction thru a loss in exchange.

Under the Federal Reserve Act, however, national banks are now permitted to accept drafts based on the importation or exportation of merchandise and the Federal Reserve banks stand prepared to discount satisfactory paper created by this class of business. Under these conditions, the Paris bank, referred to in the preceding section, could have issued a letter of credit instructing its New York correspondent to accept Brown's sixty or ninety-day bill against delivery of the documents, which bill after acceptance could be discounted by Brown's bank or its New

York correspondent in one of the Federal Reserve banks. In other words, the procedure would have been exactly the same as in the London case, except that the New York and not the London discount market would have carried the bill until maturity.

The Federal Reserve Act has provided the machinery and it remains to be seen whether the opportunity will be freely availed of by the international financial world. It is too soon to express any definite opinion as to the ultimate success New York will attain as an international acceptance market. Nothing is more sensitive to restrictive conditions than international credit—it must ebb and flow freely or go elsewhere. Paternalistic in all things concerning banking and finance, the United States has already surrounded this concession to modern requirements with restrictions and definitions that tend to hamper that freedom of operation which is so essential in an international money market.

7. *Export letters of credit.*—In some countries where banking facilities are undeveloped, it may be difficult for the foreign customer to obtain a letter of credit on New York or London, or even to make a dollar remittance. In financing the exports to such countries, a different system is necessary in order that the American exporter can obtain his money without awaiting remittance from abroad. This system is effected thru what are known as "export letters of credit," which are issued by an American banker without the intervention of a foreign bank. The

general nature of letters of credit has been explained in the chapter on Bills of Exchange. Their service in financing exports can be best understood by a concrete example. Williams, of Chicago, sells a shipment of machinery to a firm in Honduras where there are no direct exchange facilities with New York and it would be very difficult for the Honduras merchant to purchase a draft on New York. Under these circumstances Williams, not wishing to wait until a remittance is forthcoming, goes to his banker with invoices, bills of lading and other documents and asks him for an "export letter of credit." The shipment, we will say, is worth $10,000 and against this the Chicago bank gives Williams a letter of credit authorizing him to draw at ninety days against its London correspondent for £1,800, or about ninety per cent of the amount of the invoice. This draft on London for £1,800 Williams sells in the exchange market in New York or Chicago (the letter of credit being his authorization); he receives dollars therefor at the current rate of exchange for ninety-days bills and obtains the bulk of his money. The documents are forwarded by the Chicago bank to its correspondent in Honduras which collects the whole amount, $10,000. This is then remitted in pounds sterling to London to the credit of the Chicago banker. Before the ninety-days draft, originally drawn, matures, there will have been received in London more than sufficient funds to retire it, and neither the Chicago bank nor its London correspondent have had to dis-

burse any money. The difference between the amount of the draft, £1,800, and the remittance from Honduras, less any charges, is paid to Williams by the Chicago banker and the transaction is closed. As an alternative, the Chicago bank itself could have drawn the draft on its London correspondent for £1,800 and turned over to the exporter the dollar proceeds. By this method a better rate would be obtained for the draft and the exporter is saved the trouble of an exchange transaction.

London has direct relations with almost every part of the world and thus becomes the natural clearing house between countries whose exchange transactions with each other are limited.

REVIEW

What are visible exports; invisible exports?

Of what does trade between two countries consist? What are the principal methods used by a country to adjust an excess of imports over exports? What is done when these methods fail?

Give an example of the way in which the commercial bill of exchange is used.

How does an American exporter proceed when he is unwilling to risk a shipment of goods against unsupported documents?

What disadvantage has the use of letters of credit on London caused the American merchant engaged in foreign trade? What provision has been made under the Federal Reserve Act as a remedy for this situation?

CHAPTER IX

FOREIGN EXCHANGE AND IMPORTS

1. *Commercial letters of credit and importing.*—Altho merchants importing goods into a country can settle for them direct either by remitting or by accepting a draft drawn by the foreign merchant, these methods are now seldom followed except in the case of minor transactions. The employment of letters of credit as a medium of settlement for imported goods offers greater advantages than any other method of payment, to both the exporter and importer.

In America, import credits are much more important than export credits and are issued in much larger volume. Commercial letters of credit are of advantage to the importer of merchandise because they enable him to buy goods on a cash basis in any part of the world, tho the actual payment is deferred sixty or ninety days, giving him a chance to dispose of the goods in the meanwhile. They insure for him shipment of goods within a stipulated time, exactly as described in the credit. He is also able to order, in advance, goods to be manufactured according to his specifications and requirements without prepayment of any sort, the letter of credit being sufficient security for the exporter. The majority of the letters of credit have hitherto been issued on London, but

the recent war and the Federal Reserve Act have brought dollar credits issued on New York into more general use, especially for South American business. The acceptance and discounting of international bills are such new departures for the New York banks that it is too early to consider them as fully established conditions. For the purposes of illustration we will therefore follow the history of a credit established in London.

2. *British acceptances under letters of credit.*— The enormous credits accorded by London to bankers and merchants thruout the world generally take one of two forms—acceptances granted under letters of credit, or finance bills. The following illustration will show the operation of an acceptance under a letter of credit.

When a merchant in Holland, France, the United States or any other country wishes to buy goods in any other part of the globe, he generally obtains a credit thru a London banker direct or thru a banker in his own country. In the latter case, he instructs the foreign merchant from whom he purchases goods to draw on the London banker at so many months, sight. Take the case of a tea merchant in New York, Mr. Brown, who negotiates with Napier & Company, tea growers in Ceylon, for a consignment of tea. Napier & Company probably know little or nothing about the financial standing of Brown, and even if it were excellent, would not be willing or able to await a remittance from New York for the shipment. Na-

pier therefore asks Brown to arrange for a credit on London in his favor for the amount of the invoice, say £1,000. Brown goes to his bankers, the Bank of New York, and requests them to open up a credit in London in favor of Napier & Company against ninety-days bills with documents attached. The Bank of New York instructs Parr's Bank, their London correspondent, accordingly, and Brown is furnished with a letter of advice to send to Napier & Company stating that the credit has been opened in London on the terms set forth. On receipt of the letter, Napier & Company fill the order and place the tea on shipboard, receiving a bill of lading therefor. Napier then draws a draft at ninety days, sight, for £1,000 and attaching the bill of lading, insurance policy, invoice, etc., thereto, takes it to his banker, the Bank of Madras, Colombo, who purchases the bill from him at the current rate of the day on London. Thus Napier & Company obtain their money immediately. The Bank of Madras forwards the draft and documents to its correspondents in London, the Bank of Commerce, who present it to Parr's Bank without delay. The latter accept it, but retain the bill of lading and other documents. These they forward to the Bank of New York, which is thus enabled to obtain possession of the tea when it arrives and either store it for their customer Brown, on account, or deliver it to him on a trust receipt until he finally pays for it.

3. *History of the draft in London.*—To return to

the draft—this is now an accepted bill with first-class names on it and has an international currency. It is salable in any country in the world, because every country finds it necessary to remit constantly to London and every foreign bank has a London office or correspondent.

The bill can be held until maturity and the proceeds can then be placed to the credit of the Bank of Madras, but the more usual course is for the latter bank to instruct its London agent, the Bank of Commerce, to discount the bill in the open market and place the proceeds to its credit, or the bill may be remitted by the agent to another foreign center to settle some account there. In either case, the bill returns to London at its maturity and is paid to the holder on that date by Parr's Bank, tho in the meantime, it may have been bought and sold several times and have passed thru half a dozen hands.

Parr's Bank depends on the Bank of New York to provide funds to meet the bill at maturity and would not have issued the credit unless it had had confidence in the Bank of New York. The Bank of New York in its turn has confidence in its customer's ability to reimburse it and of course it insures that he provides the necessary funds for transmission to London in time to discharge the obligation.

4. *Position of the obligants on the bill.*—To sum up the results of the transaction:

1. Brown, the actual debtor, had the use of £1,000 for three months and yet he himself would probably have some

difficulty in naming his actual creditor at any particular moment.

2. Napier & Company in Colombo received their money as soon as the tea was delivered on shipboard, tho as drawers of the bill, they remain obligants until payment.

3. The Bank of Madras bought the bill from Napier & Company and were only out of its money until the bill had reached London, was accepted, discounted and placed to the bank's credit. It, however, remains liable as indorser of the bill until its payment.

4. The Bank of Commerce advanced no money. They acted only as agents of the Bank of Madras in obtaining acceptance of the bill, selling it in the discount market and crediting the proceeds; therefore their name does not appear on the bill. For their services they receive a commission.

5. Parr's Bank is primarily liable on the bill as acceptor but as the Bank of New York must provide the funds for payment it advances no money on the transaction. It merely makes a small commission for the use of its name.

The above are all interested, directly or indirectly in the bill but not one of them, with the exception of the Bank of Madras, has advanced a single cent. The question still remains, "Who paid for the tea during the three months' currency of the bill?" The answer is "Those firms which discounted and purchased the bill in the open discount market of London."

5. *The part London plays.*—In much the same way, merchants in every country in the world have been accustomed to arrange credits in London for every other country in the world and for every conceivable class of goods. On the outbreak of war, it was estimated by Mr. Lloyd George that British

banks and accepting houses were liable for over £350,000,000 of these acceptances, the greater part of which had been discounted on the London market. Altho British signatures were primarily liable for this huge amount, it was not really for their own account, for they looked to those on whose behalf they had accepted the bills, to provide the funds. The unprecedented demand for sterling exchange at the beginning of the war was due to the attempt on the part of foreign obligants to provide funds for the maturing liabilities incurred by the British banks for their account, and under their instructions. Exchange rates on London the world over rose far above the gold point. If Great Britain had insisted on these debts, it would have been impossible to obtain the necessary sterling funds except at a most ruinous figure. Even if the English banks could have met the acceptances as they matured out of their own funds, disgrace if not ruin would have befallen a number of the foreign banks. It was to protect this vicarious liability of the English banks that a moratorium was proclaimed and there is no doubt that this wise step saved the neutral countries, indebted to London, both financial loss and worry. Mr. Lloyd George in referring to this class of note says:

> There was that amount of paper out with British signatures at that time. Most of that had been discounted. The cash had been found by British sources, and the failure was not due to the fact that Great Britain had not paid her creditors abroad. It was due entirely to the fact that those

abroad did not pay Great Britain. I think that it is very important from the point of view of British credit, to have that thoroly understood, for when the "moratorium" came, and there appeared something like a failure of British credit, it was not a British failure at all. It was because we could not get remittances from other countries. We had already paid, but it was vital to the credit and good name of this country that these bits of paper, which are circulated thruout the globe, with British names upon them, with names that have been associated with British trade and commerce—it was vital to the good name and credit of this country, to its continuity of trade and its character, that they should not be dishonored. What really happened was that there was a complete cessation of credit, a breakdown of the exchanges. It was exactly as if a shell had broken an arch in an aqueduct, and there was a cessation of the flow that had been going on before, and what we had to do was temporarily to repair the arch so that the flow should continue.

Acceptances under "letters of credit" are not of course confined to London; they are drawn on other large financial centers such as Paris and New York, but owing to the special facilities afforded by London the bulk of these credits were, before the war, drawn in sterling.

REVIEW

Of what advantage to the importer are commercial letters of credit?

Give an example of how British acceptances under letters of credit operate.

How did the outbreak of the war affect London credits?

CHAPTER X

FINANCE BILLS

1. *Definition of a finance bill.*—A long bill of exchange drawn by a banker or financial house in one country on a banker in another against securities in the hands of the latter is generally called a "finance bill." The privilege of drawing such bills enables bankers to anticipate a change in the rate of exchange and also to tide over a period of high exchange which otherwise would necessitate a shipment of gold. When properly used it is an important factor in international exchange and serves not only as a cheap and efficient corrective to high rate, but aids in the development of the production and trade of the world by rendering credit more fluid and leveling money rates.

There is a wide diversity in the definitions which are given of a finance bill. Franklin Escher defines it as "an unsecured long bill of exchange drawn by a banker in one country on a banker in another country and sold for the purpose of raising money." Other authorities are inclined to include all long bills originating between bankers, whether secured or not. The latter is perhaps the more general understanding of the term and I would suggest the following definition as comprehensive:

A finance bill is a long bill of exchange, secured or otherwise drawn by a banker in one country on a banker in another, the funds for the payment of which at maturity must be provided by the drawer.

When a New York banker has a satisfactory drawing arrangement with his London correspondents he is more or less independent of market conditions, and even if there is a scarcity of commercial bills on the market, he is in a position to create a supply of bills at a stated price. He is reasonably sure that he will be able to buy exchange at a lower figure to meet his obligations before their maturity, as a high rate of exchange brings out a large supply of finance bills resulting in a lowering of the rate. Mr. George Clare in his book on "Foreign Exchange" says, "The bidding need only be raised a centime or two to tap an almost inexhaustible source of supply—that of bankers' drafts." In other words, if the remitter cannot obtain a ready-made bill, he need only pay a little more and have one made to order.

2. *Finance bill for New York account.*—The most common occasion for the use of finance bills is to anticipate a fall in the exchange rates. For instance, under normal conditions, during the summer months, the rate of exchange for sterling is generally high in New York. It drops gradually until the fall, when large shipments of cotton and wheat result in heavy offerings of sterling exchange. Before drawing a finance bill, it is necessary for the New York banker to make arrangements with the accepting

bank in London as to the amount, terms, etc., of the accommodations. Such arrangements are general, applying to a series of transactions, or specific, applying to a single transaction only. Suppose the rate at the end of August is 4.88 for demand bills, and a banker, A, desirous of anticipating the probable drop in exchange in the fall, arranges with his London correspondent, B, against securities deposited with him, for a credit of £10,000 by way of a sixty-days draft on London. A immediately draws a draft on B at sixty days for £10,000, which he can either (1) sell in New York at the sixty-days rate for bills or else (2) send to London to be discounted and placed to his credit there, and then sell his own sight drafts against this credit. In either case, he will have the use of the proceeds in New York until the maturity of the bill, when he must be prepared to place funds with B to meet it.

3. *Method of using finance bills.*—It will be noticed that B does not advance any money; he simply lends his name to A and the London discount market provides the funds. The advantages and disadvantages of this procedure may be summed up in illustrations:

1. A will sell his sixty-days bill in New York if he can obtain $4.8523 per pound sterling or better. This rate is arrived at as follows:

Demand rate for sterling	488.
[1] Less, 63 days' interest at 3% (being the London market rate for prime bankers' bills)	2.527

[1] Prior to the war, interest and stamps used to be calculated on the basis of $485 to the £100, but owing to the wide fluctuation they are now frequently calculated on the actual rate itself.

Stamps 1/20 of 1%	.244	2.771
Per £100		485.229

or $4.8523 per pound sterling.

The sixty-days bills for £10,000 should therefore net him $48,522.90
A employs these funds in New York for sixty days at 4%, earning 343.49

$48,866.39

Seven days before the bill matures A purchases a demand draft for £10,000 which he forwards to London to provide for the payment of the bill. By this time exchange has fallen as he anticipated and is now at 4.85, so that he is able to buy the covering draft for 48,500.00

A's profit (from which must be deducted B's commission of probably 1/8 of 1%) is therefore ..... $ 366.39

There is, of course, the risk that exchange might not fall at the end of October as anticipated, or that the interest rates in New York might not be maintained above 3 per cent.

2. If A sent the sixty-day bill to London and immediately sold a demand draft against the remittance, the transaction would work out as follows:

Amount of 60-days draft		£10,000.00
Less interest at 3%	£51.781	
Less stamps, 1/20 of 1%	5.00	56.78
Net proceeds in London		£ 9,943.22

A would thus be in a position to sell his demand draft for the above amount and provide himself with funds in New York, £9,943.22 at $4.88=$48,522.90, the same amount as realized in (1) by the sale of the sixty-days bills itself in New York.

The net proceeds, £9,943.22, are taken as the amount of the demand draft for illustrative purposes; in actual practice the draft would have been drawn in

round figures, £10,000. The same result would be obtained, thus:

£10,000 demand draft realizes in New York	$48,800.00
From which must be deducted the London charges for interest and stamps, £56.78 at $4.88	277.09
	$48,522.91

If, at the maturity of a finance bill, it is not convenient to collect and remit the relative loan, it is generally possible to provide the necessary funds to meet the maturing bill by the sale of another bill.

4. *Loan of a finance bill.*—The last example shows that the New York banker assumes the risk of there being a rise in the rate of exchange before the transaction has been completed and the acceptance in London retired by a sterling remittance.

So far as the actual borrower is aware, the loan is an ordinary loan in American currency; he has no means of knowing that there is any question of foreign exchange connected with the transaction. He has borrowed, say, $50,000 at two months at 4 per cent, but with his bank the case is different. It has loaned the proceeds of a sixty-days bill on London and at its maturity will have to purchase a demand bill or cable for £10,000 at the current rate of exchange. The price paid for the bill will determine the gain or loss in the transaction. If exchange rates have gone down as anticipated a good profit on the transaction may be made, but if, on the other hand, the rate has risen, the price which is to be paid will mean a loss in the transaction, if it will not wipe out all the profit.

Bank A can eliminate this risk by loaning the bill of exchange instead of the dollar proceeds, and charging a commission instead of a fixed rate of interest; the borrower thus assuming the risk of a rise in the exchange rate. The borrower in this case, instead of receiving a loan of $50,000, would be handed A's sixty-days draft on London for £10,000. This, he would immediately sell for dollars, but when the time for repayment came, he would have to pay back not dollars but a demand draft for £10,000 which he would have to purchase at the current rate of exchange. The banker makes a commission of about one-half of one per cent for sixty days and runs no risk in the matter other than the loaning risk to his customer.

5. *A finance bill on London account.*—Another form of finance bill is created when a London banker, desirous of taking advantage of a high rate of interest in New York, instructs his correspondent to draw on him for £10,000 at sixty days and lend the proceeds on the New York market. This the New York banker does and sells the bill in New York, investing the money. Neither banker employs his own money in the operation, the money being provided by the London market where the bill is discounted. At the maturity of the loan, the London bank is placed in funds to meet its acceptance by the New York banker, or if conditions continue favorable the amount may be either renewed or reloaned in New York. A transaction of this nature may be entirely on the account

of and at the risk of the London banker, or it may be on joint account, in which case both the risk and the profit are shared.

6. *Other uses of finance bills.*—Finance bills, both secured and unsecured, may be drawn regardless of the conditions of interest or exchange, purely for the sake of raising money. As a rule, finance bills have a reasonable excuse for their existence. It may be objected that this is a way of getting money which might be easily abused, but in practice this does not happen. The London market is, at all times, uncannily in touch with the position of both the drawer and acceptor and any attempt on the part of either to issue this class of bill beyond what he is legitimately entitled to on the basis of his business or financial standing, is promptly nipped in the bud, first, by demanding higher rates and finally, by refusing to take the paper. Either action is, of course, detrimental to the credit of the party concerned, and bankers and others who operate in finance bills are most careful to leave a large margin for safety in their use of the very sensitive discount market. It is plain from the above explanations that when many of these finance bills are drawn on London they will have a tendency to lower the rate of exchange by increasing the supply of sterling bills on the market.

In the above illustrations, London and New York alone have been referred to; finance bills, of course, obtain between other countries but to a much less degree.

7. *Forward exchange.*—Operations in "forward exchange" have several points in common with finance bills; both anticipate fluctuations in the rate of exchange and both involve a large element of risk. In its simpler and more commercial form, forward exchange or "futures," as it is sometimes called, is a term used to express the buying or selling of foreign exchange for future delivery. For instance, in July, a manufacturer in Canada accepts an order for goods to be manufactured and shipped to England before October 15th. Knowing from experience that a change in the rate of exchange in October might make serious inroads into his profits, he asks his bank to quote him a rate for the amount of his shipment, and contracts to deliver the bills of exchange to the bank in October. In this way the rate is definitely fixed, and the risk of a falling rate is eliminated.

The bank can protect itself in two ways; by selling its own bills to fall due in October in London, or by selling London exchange for future delivery. As far as the obligation is concerned both cases amount to the same thing, except that in the latter no money transaction is involved. The decision of the bank is governed by the rate of interest obtaining in London in July. It is obvious that dealing in forward exchange is not necessarily based on an actual prospective transaction.

Franklin Escher, in his book, "The Elements of Foreign Exchange," in reference to the making of money in dealing in "futures," says:

As a means of making—or of losing—money, in the foreign exchange business, dealing in contracts for the future delivery of exchange has, perhaps, no equal. And yet trading in futures is by no means necessarily speculation. There are at least two broad classes of legitimate operation in which the buying and selling of contracts of exchange for future delivery plays a vital part.

Take the case of a banker who has bought and remitted to his foreign correspondent a miscellaneous lot of foreign exchange made up to the extent of one-half, perhaps, of commercial long bills with documents deliverable only on "payment" of the draft. That means that if the whole batch of exchange amounted to £50,000, £25,000 of it might not become an available balance on the other side for a good while after it had arrived there—not until the parties on whom the "payment" bills were drawn chose to pay them off under rebate. The exchange rate, in the meantime, might do almost anything, and the remitting banker might, at the end of thirty or forty-five days, find himself with a balance abroad on which he could sell his checks only at very low rates.

To protect himself in such a case the banker would, at the time he sent over the commercial exchange, sell his own demand drafts for future delivery. Suppose that he had sent over $25,000 of commercial "payment" bills. Unable to tell exactly when the proceeds would become available, the banker buying the bills would, nevertheless, presumably have had experience with bills of the same name before, and would be able to form a pretty accurate estimate as to when the drawees would be likely to "take them up" under rebate. It would be reasonably safe, for instance, for the banker to sell futures as follows; £5,000 deliverable in fifteen days, £10,000 deliverable in thirty days, £10,000 deliverable in forty-five to sixty days. Such drafts on being presented could in all probability be taken care of out of the prepayments on the commercial bills.

By figuring with judgment, foreign exchange bankers are often able to make substantial profits on operations of this

kind. An exchange broker comes in and offers a banker here a lot of good "payment" commercial bills. The banker finds that he can sell his own draft for delivery at about the time the commercial drafts are apt to be paid under rebate, at a price which means a good net profit. The operation ties up capital, it is true, but is practically without risk. Not infrequently good commercial "payment" bills can be bought at such a price and bankers' futures sold against them at such a price that there is a substantial profit to be made.

The other operation is the sale of bankers' futures, not against remittances of actual commercial exchange but against exporters' futures. Exporters of merchandise frequently quote prices to customers abroad for shipment to be made in some following month, to establish which fixed price the exporter has to fix a rate of exchange definitely with some banker. "I am going to ship so-and-so, so many tubs of lard next May," says the exporter to the banker, "the drafts against them will amount to so-and-so much. What rate will you pay me for them—delivery next May?"

The banker knows he can sell his own draft for May delivery at, say, 4.87. He bids the exporter 4.86½ for his lard bills, and gets the contract. Without any risk and without tying up a dollar of capital the banker has made one-half cent per pound sterling on the whole amount of the shipment. In May, the lard bills will come in to him, and he will pay for them at a rate of 4.86½, turning around and delivering his own draft against 4.87.

Selling futures against futures is not the easiest form of foreign exchange business to put thru, but when a house has a large number of commercial exporters among its clients there are generally to be found among them some who want to sell their exchange for future delivery. As to the buyer of the banker's "future," such a buyer might be, for instance, another banker who had sold finance bills and wanted to limit the cost of "covering" them.

The foregoing examples of dealing in futures are merely examples of how futures may figure in every-day exchange

transactions. Like operations in exchange arbitrage, there is no limit to the number of kinds of business in which "futures" may figure. They are a much abused institution, but are a vital factor in modern methods of transacting foreign exchange business.

REVIEW

What is a finance bill?

Show, by an illustration, what arrangements a New York banker makes with a London bank before drawing a finance bill.

Give an example of how a finance bill on London account is created.

How does the London market prevent either a drawer or an acacceptor of finance bills from issuing them beyond the amount to which they are legitimately entitled?

Describe an operation in forward exchange.

CHAPTER XI

ARBITRAGE

1. *What is arbitrage?*—Arbitrage, or as it is sometimes called, indirect exchange, is a term applied to any transaction which takes advantage of differences of prices for the same article in different markets. Arbitrage is thus defined in the Century Dictionary: "The calculation of the relative value, at the same time at two or more places of stocks, bonds or funds of any sort, including exchange, with a view to taking advantage of favorable circumstances or differences in payments or other transactions." This definition should include gold and, in a general sense, any other commodity. Wheat, for example, may be sent from one place where it is relatively cheap to another where it is relatively dear; this is arbitraging in wheat. High prices in one market induce shipments from markets with low prices and this process constantly tends to equalize prices generally.

2. *When arbitrage is transacted.*—Arbitrage transactions are confined entirely to large financial centers, such as London, New York and Paris. The work calls for expert knowledge and a close study of financial conditions, as it is essential that the arbitrageur keep in daily, if not hourly, touch with his foreign

correspondents, in order that they will be prepared to carry out a transaction without delay.

A recent article in the *New York Financier* says:

In conducting such operations it is essential that the banker shall be advised, thru the cable, of the varying conditions of the markets abroad. In such markets as Paris and London, where the exchange transactions are always large, rates often fluctuate sharply and conditions change frequently. Consequently, tho the situation may be favorable one day it may suddenly become adverse, necessitating some modification of the method of arbitraging. Moreover, it frequently happens that after a successful negotiation has been effected by a banker as the result of private information, his competitors may be advised of the favorable conditions prevailing and they also may draw in a similar manner. Hence each operator seeks to obtain for himself alone all possible information regarding changes which are likely to affect his business. Sometimes a banker may find, upon calculation, that it will be profitable to conduct arbitraging of exchange between three or more points; in such cases the conditions at each of the points must first be ascertained and calculations have to be made with the utmost care. Occasionally in drawing bills the banker, in order to take advantage of arbitraging operations, will transfer credits, thru the cable, from an adverse center to a point favorable for his purpose. Indeed there are very many ways by which arbitraging can be profitably conducted by bankers having the requisite facilities and the necessary skill for such operations. It will be observed that operations in arbitraging of exchange require the services of men of the largest experience, and hence the business can be conducted to advantage only in the most thoroly equipped offices. The exchange student who enjoys opportunities for practice in such offices and has the determination to qualify himself for this branch of exchange work by acquiring a knowledge of all of its intricate details will have no diffi-

culty after such qualification in securing advancement. The field for operations in arbitraging of exchange is continually and rapidly broadening, and there will probably always be a demand for the services of men capable of taking positions as managers of exchange houses or departments.

3. *Parity.*—A parity is the price at which a bill should be quoted in order to compare it with the quotations for similar bills elsewhere. To make this comparison it is of course necessary to express every quotation in a common form. Care must also be taken to bring quotations for long bills to a demand basis, by allowing for stamps and interest.

If the New York parity on Paris is 5.1895 as against the actual rate of 5.16⅞ in New York for Paris checks, an opportunity for arbitrage profit of 2.07 centimes per dollar is offered. On $100 this amounts to 40 cents, and on $48,754.56 to $195. Bankers who engage in arbitrage transactions generally construct a parity table for ready reference between the more important exchanges. The following is an example of such a table, showing parities in dollars, francs and sovereigns. Similar tables may be made for sterling, marks and dollars, for francs, marks and dollars, etc.

£1 =	25.20	25.21	25.22	25.23	25.24	25.25
	$1	$1	$1	$1	$1	$1
$4.85	5.1959	5.1979	5.20	5.2021	5.2041	5.2062
4.85¼	5.1932	5.1953	5.1973	5.1994	5.2014	5.2035
4.85½	5.1905	5.1926	5.1947	5.1967	5.1988	5.2008
4.85¾	5.1879	5.1900	5.1920	5.1940	5.1961	5.1982

When the New York quotation for sterling is $4.85 and the London quotation for francs 25.20, the New

York parity quotation for francs is 5.1959; if the market rate differs from this there is an opportunity for arbitrage. Conversely, given the two franc quotations, the table shows the parity of the pound sterling in New York, or, given the sterling and franc rate in New York, the table shows the parity quotation of francs in London. Intermediate rates can be arrived at by interpolation. For instance, in the example given in Section 6, the sterling rate is 4.8560, the nearest quotation in the table is for 4.8550—a quarter cent making a difference of .0026 centime (5.1905 — 5.1879) in the quotation. Therefore, $\frac{10}{25} \times .0026 = .0010$ centime deducted from 5.1905 = 5.1895. The table is calculated by dividing the value of the sovereign in francs by its value in dollars, thus $\frac{25.20}{4.8560} = 5.1895$.

4. *Parity in stocks.*—Parity, when applied to a stock, means the price which is its equivalent when quoted in a different market. For instance, the London price of a stock exceeds the New York price of the same stock by about 2½ or 3 per cent, after the exchange rate and the London method of quoting American stocks ($5 to the pound) are taken into consideration. With a cable rate of 4.87½ the London parity of New York stock at 68 would be 69.75.

$$\text{N. Y. parity} = \frac{\text{London parity} \times \text{rate of exch.}}{5} \text{ or } \frac{69.74 \times 487\frac{1}{2}}{5} = 68.$$

$$\text{London parity} = \frac{\text{New York parity} \times 5}{\text{Rate of exchange}} \text{ or } \frac{68 \times 5}{487\frac{1}{2}} = 69.74.$$

In commodities, the prices at two different centers are at parity when the difference represents only the actual cost of transportation, insurance and interest.

5. *Chain rule.*—Most of the calculations in arbitrage transactions can be put in the form of simple equations, and require only correct reasoning for their solution. A quick tho mechanical method of calculation is called the chain rule. It consists of arranging the terms of the exchange of the various currencies under consideration, in such a manner that the required equivalent, or parity, is easily obtained. A study of the following example will make the method clear:

Berlin check rate on New York is 95 cents per 4 marks,
Berlin check rate on London is 20.5 marks per £1,
Find the parity of the sovereign in New York.

How many x = b	$x = £1
if b = c	£1 = 20.5 marks
and c = d	Mks. 400 = $95
and d = 10 x	

$$x = \frac{1 \times 20.5 \times 95}{1 \times 400} = \$4.86875$$

The last term is always in the same currency as the unknown quantity, or first term. It will be noted that these equations are arranged in such a manner that the denominations are in sequence like the links of a chain; hence the name. The value of the unknown quantity (x) is then taken as equal to a fraction, the quantities on the right-hand side forming the numerator, and those on the left-hand side, the denominator. The product of the numerator divided by that of the de-

nominator will give the required answer. "Chain rule" is applicable to all kinds of exchange and mercantile calculations.

How many dollars (x) = £1
If the weight of £1 = 123.274 grains standard gold
If 12 grains of standard gold = 11 grains of fine gold
And if 232.2 grains of fine gold = $10

$$x = \frac{1 \times 123.274 \times 11 \times 10}{1 \times 12 \times 232.2} = \$4.86656$$

6. *Simple arbitrage.*—The rate of exchange between two or more places corresponds or tends to correspond. In a preceding section it was shown how exchange rate between two places is almost automatically adjusted. Similar influences in the form of arbitrage are brought into operation to synchronize the exchange rates the world over. There is thus a certain sympathy or relation between all foreign exchange quotations. The quotations in New York for exchange on Berlin or Paris are largely influenced by the price of sterling exchange. If the price of marks in New York should fall to a point where there would be a profit in an arbitrage transaction, the demand for drafts on Berlin, by those who wish to make this profit, would almost immediately force the mark quotation up again. Similarly New York, while a debtor to England with consequent high sterling rates, may be the creditor of France or other countries in Europe, and drafts on these countries are remitted to

London and thus tend to improve (i.e., lower) the rate of sterling exchange. When only three places are involved, the transaction is called simple arbitrage.

To give a concrete case of simple arbitrage: Suppose a banker in New York has the following data before him:

London check rate in New York....$4,8560 per £
Paris check rate in New York.....Fcs. 5.16⅞ per $
Paris check rate in London.....Fcs. 25.20 per £

A brief calculation or a glance at his table of parities shows that there is an opportunity for a profitable arbitrage in francs between London and New York. He therefore sells a draft on Paris for Fcs. 252,000 at 5.16⅞ and with the proceeds buys a draft for £10,000 at 4.8560 per £, at the same time cabling his London correspondent to purchase a draft for Fcs. 252,000 at 25.20 per £, or better, and send it to Paris to the credit of his account there. This purchase costs £10,000 and is provided for by a draft for the same amount remitted from New York. The banker's position is now as follows:

Sale of francs 252,000 at 5.16⅞.....	$48,754.56
Purchase of draft for £10,000 at 4.8560 to cover purchase of Fcs. 252,000 in London at 25.20.....	48,560.00
Profit	$194.56

Without using any of his own capital and without any expense except the cost of a cable and a small

commission to his London and Paris correspondents, the banker has made a profit of over $190. The result of this and similar transactions made at the same time by other New York bankers would be to lower the New York rate for francs by increasing the supply, and to raise the London rate for francs by absorbing the supply, thus tending to equalize rates all round.

7. *Compound arbitrage.*—The example of arbitrage just given is of the simplest form, but it is typical of such transactions. The banker might have found it more profitable to provide cover for his draft on Paris by remitting marks to Berlin and purchasing his francs there, or he might have instructed his London correspondent to purchase and remit a draft to Berlin with instruction to the Berlin bankers to remit francs to Paris. In the first instance he simply substitutes Berlin for London in the transaction, but in the second instance he would operate both thru London and Berlin; four places are involved, and the transaction is known as compound arbitrage.

The study of arbitrage operations is both interesting and instructive. The following transaction will bring out some of the underlying principles more clearly:

PROBLEM: It is desired to transfer $100,000 from New York to London on the basis of the data given in the first column. Which method of remittance should be selected?

It is first necessary to bring every quotation to a common

form; for example, how many dollars equal £1. Care must be taken to bring quotations for long bills to a check basis, allowing for stamps, etc. The lowest parity in dollars will be the cheapest method of remitting to London, but the dearest return (remitting from London to New York), conversely the highest parity, is the dearest remittance and the cheapest return:

	Factors:	Calculation:	$ Price of £1 Check
A	Berlin check in New York, Mk. 4 = 95 cents Berlin check in London, £1 = Mk. 20.5	$X = £1 check 1 = 20.5 Mk. 4 = .95	
		X = $4.8687	$4.8687
B	New York check in Berlin, $1 = Mk. 4.21 Berlin check in London, £1 = Mk. 20.50	$X = £1 check 1 = Mk. 20.5 4.21 = $1	
		X = $4.8693	$4.8693
C	New York rate on Vienna, 20.30 cents per kronen..... Vienna check rate on London, 240.17½ kronen per £10	$X = £1 £10 = 240.17½ 1 = 20.30 cents	
		£10 = $4.8755	$4.8755
D	London check in New York, $4.8760		$4.8760
E	Cable transfers to London in New York, $4.8795..... London discount rate, 3%....	$4.8795 less .0028 (7 days' interest 3%)	$4.8767
F	London 60-days draft in New York, $4.85.....	$4.85 plus .0251 (63 days' interest 3%) and stamps .0024	$4.8775
		$X = £1 check 1 = 25.2 frs. 5.1625 = $1	
G	New York check in Paris, $1 = Frs. 5.16¼ Paris check in London, £1 = Frs. 25.20	X = $4.8813	$4.8813
		$X = £1 check 1 = 25.2 fr. chk. 5.15625 = $1	
H	Paris check in New York, $1 = Frs. 5.15⅝ Paris check in London, £1 = Frs. 25.20	X = $4.8872	$4.8872

A study of the above calculations shows that the cheapest method of remittance would be thru Berlin: a pound sterling costing $4.8687. The transfer could

be made either by forwarding to London a check on Berlin or by instructing the Berlin correspondent to draw on New York in favor of London. The sterling equivalent of $100,000 on this basis would be £20,539:3:0.

The dearest method of remittance is via Paris, the difference between the Paris and the Berlin rates being 1.85 cents per £, or $375 on a transfer of $100,000. The sterling equivalent of $100,000 on this basis would be £20,461:6:0. It should be noted that as the Paris method of remittance is the dearest, it is the cheapest return and would therefore be selected for the transfer of money from London to New York.

8. *Arbitrage in gold.*—Arbitrage transactions in gold and silver are of a great variety but they are all founded on the idea of sending bullion to some point where it can be used to buy exchange cheaply on some other point. The one best known of these is the so-called "triangular operation," in which gold is shipped to Paris or some other European market for the purpose of buying exchange on London. The process is as follows: The gold is shipped to Paris, and exchange on London is there purchased with the proceeds. This exchange is remitted to London for the credit of the American bank shipping the gold; the balance so created offsetting a demand draft drawn by the latter on London. The following are the details of an actual shipment:

48,500 ounces bar gold .955 fine at $20.5684.....		$997,567
Freight, 1⅛ per cent.....	$1,247	
Insurance, 4½ cents per $100.....	450	

Assay office charge, 4 cents per $100	$400	
Interest 6 days at 2 per cent	333	
(From time gold is shipped to Paris until the drafts on London can be sold)		
Cartage and packing	60	
Com. in Paris	250	$ 2.740
		$1,000,307
Bank of France buys gold .995 fine at fcs. 3419.81 per kilo (= 106.3705 francs per troy ounce)		
48,500 ounces at fcs. 106.3705 = fcs. 5,158,969		
Fcs. 5,158,969 at 25.10 = £205,536		
£205,536 at 4.8670 =		$1,000,342
Profit		$ 35

The following are conditions under which there is practically no profit or loss:

New York Exchange on London	4.8670
Paris Exchange on London	25.10
Money in New York	2%

REVIEW

What is arbitrage and what may it include?

What requirements are necessary in the work of an arbitrageur?

Define a parity. Give an example.

What is meant by parity in stocks?

Show, by examples, the difference between simple and compound arbitrage.

What is the essential idea in gold arbitrage?

CHAPTER XII

RATES OF INTEREST

1. *Interest an important factor in exchange quotations.*—The rate of interest at which the difference between long and short bills is calculated is based on the prevailing rate of the country on which the bill is drawn. This would not materially affect the situation if the rates of interest were uniform all over the world, but rates of interest in different financial centers vary considerably and these differences have an important bearing on exchange. Under normal conditions, international money and credit circulate most freely in the most attractive channels, and a rise in the interest rate in a foreign money market will accelerate the flow of outside capital to that point, while a fall in the rate of interest will retard it. So, while demand and supply govern rates of exchange, the rates of interest at home and abroad react on these influences and affect demand and supply. Their combined effect causes the rates of exchange to fluctuate from day to day and thus the floating capital of the world is attracted from one center to another.

2. *Long bills.*—When we say that exchange rates between two countries usually fluctuate between the specie points, we refer only to the rate for demand or

sight bills. This is sometimes called the pure rate of exchange as it involves no time element except that required for the actual transmission of the draft.

Assuming that the rate at New York for a sight bill or check on London is 4.8725 how would the value of a sixty-days sight bill be ascertained? As payment in the latter case is deferred for sixty-three days (60 days + 3 days grace) it will be worth less than a demand bill by the interest for 63 days at the London rate. The calculation is based on the London rate of interest, because the holder of the bill in London can always discount it at the prevailing rate.

Assuming that the market discount rate for prime bills is 3%, the rate for a sixty-days bill would be arrived at as follows:

Demand rate per £100		$487.25
Less 63-days interest	2.52	
Stamp 1/20	.24	2.76
		$484.49

corresponding to the nearest commercial rate, the figure would be $4.8450.

If, therefore, we know the rate of interest prevailing in foreign markets and the stamp taxes imposed by foreign countries, the rate for any long bill can readily be computed from the demand rate.

3. *Bank rate.*—In London, the bank rate is the minimum rate at which the Bank of England will discount prime three months' bills or advance money against approved securities. This rate has a direct

relation to the foreign exchange rate and the movement of gold. An increase in the rate raises the value of money and attracts gold from foreign centers; the lowering of the rate tends to lower the value of money and causes its withdrawal. The Bank of England sometimes insures the effectiveness of the rate by borrowing money in the open market, thus denuding it of supplies. The Bank of England is governed in its action in raising or lowering the rate by the relation which its reserve of gold bears to its deposits. This proportion is seldom allowed to fall below 30 per cent, while it sometimes rises above 50 per cent, the average normal condition being about 43 per cent. The importance of keeping the gold reserve intact is appreciated and it is most important to the country, as the Bank of England is primarily a bankers' bank and in a great measure controls the gold reserve of all the British banks.

In Paris, the bank rate is that fixed by the Bank of France, in Berlin that of the Imperial Bank. In New York, the bank rate is the uniform rate of the banks as distinguished from the varying rates of the other lenders.

4. *Market rate.*—The market rate of discount, also known as the open market rate or private rate, in contradistinction to the official or bank rate, is the rate charged by bankers, bill brokers and others discounting bills of exchange. Because of competition it is usually a little lower than the bank rate, but as a rule follows the latter very closely.

Clean bills drawn upon bankers are discounted at the private rate, while those drawn upon firms in good standing are generally discounted at about ¼ per cent above the private rate.

The Bank of England rate governs the rate of interest paid on deposits by the London joint stock banks. This rate is generally 1½ per cent below the Bank of England rate.

5. *Retirement rate.*—In cases where bills have documents attached, with instructions to accept payment "under a rebate of ½ per cent above the rate of interest allowed on deposits by joint stock banks," if the bank rate were 4 per cent the deposit rate would be 2½ per cent and the rebate rate three per cent. This is known as the "retirement" rate, and the bill is said to be taken up "under rebate" in order that the drawer may obtain possession of the relative goods before maturity. Such bills are known as D/P bills (documents on payment) and are not discounted by English banks.

6. *Importance of the Bank of England rate.*—The movement of gold from one country to another, or even the probability of such a movement, is an important factor in determining the rates of exchange on the countries affected. London, owing to the extreme sensitiveness of the Bank of England rate to gold movements, is particularly interested in its discount rate. Suppose, for instance, on account of a low sterling rate, New York commences to import gold from London. The Bank of England, seeing its

stock of gold becoming too low, raises its official rate of discount, which is the term applied to the minimum rate at which it will discount approved bills. The London market, whose rate is usually a little lower than that of the Bank of England, will probably rise in sympathy, but if it does not do so the Bank of England, by borrowing money in the open market, will force up the rate and the effect of dear money is soon apparent. The foreign money markets, in order to take advantage of the higher interest rate in London, will allow their balances to accumulate there for investment or will purchase bills on London. British merchants will decrease their imports and increase their exports. In this way the balance of payments gradually swings around again in favor of Great Britain. Exports of gold, therefore, cause sterling rates in New York and elsewhere to stiffen and, if the high rate is maintained sufficiently long, it will check the export and eventually induce an inflow of gold to London. Thus, the reserves of the Bank of England will again become normal and the rate will then be reduced. The importance of the Bank of England rate in controlling international exchange and gold movements cannot be overestimated, and its effects are so far reaching that monetary conditions thruout the world are directly or indirectly influenced by it. The rate is fixed by the directors of the bank on Thursday of each week and tho as few changes as possible are made, the publication of the rate is always a matter of interest to the financial world.

The Bank of England is, at all times, fully prepared to make advances against satisfactory collateral, or to rediscount approved acceptances at its minimum rate of discount. Facilities of this nature naturally create a feeling of stability and confidence among the English bankers, and the protection and assistance at their command in times of emergency enable them to conduct their business on a smaller cash reserve basis than is possible by bankers in countries without similar protection.

7. *What the Bank of England rate effects.*—It has been said that the Bank of England rate acts as a barometer of the financial condition of the world and any features of political or economic significance are reflected by its course.

Mr. A. W. Margraff [1] in pointing out the importance attaching to the fluctuation of the discount rate of the Bank of England states the various results which are effected as follows:

The discount rate:

1. Establishes the minimum rate at which the Bank of England will discount acceptable paper.

2. Fixes the rate of interest allowed by London joint-stock companies on short deposits, since this rate is one and one-half per cent under the Bank of England rate.

3. Determines the rate of interest allowed by London bankers on cash balances to the credit of foreign correspondents, keeping active accounts with them, in so much that this rate is usually ½ to 1% below the Bank rate.

4. Serves also to fix the rate of interest charged on cash overdrafts, on running accounts, as debit balances are gen-

[1] "International Exchange" by A. W. Margraff.

erally subject to the Bank rate, or ½ to 1% above, according to agreement.

5. Establishes the open market discount rate in Great Britain at which private bankers, London joint stock companies and discount houses will discount paper for local or foreign account, the rate ordinarily being from ¼ to ½% below the Bank rate.

6. Governs the "Retirement Rate of Discount" on documentary payment bills, which is the rate of interest rebated to the drawee, or acceptor of a documentary payment bill for the time from the date of retirement or prepayment to the date of maturity of the bill, this rate being ½% above the rate of interest allowed by London joint-stock companies for short-time deposits, which rate is based on the Bank rate as above.

7. Affects the value of all international bills of exchange as an advance in the Bank rate either advances the rate of exchange for a demand sterling draft in a foreign country or depreciates the worth of a long time sterling bill, as the interest rate for credit balances and the discount rate for long time paper are indirectly dependent upon the Bank rate.

8. Has the power of protecting the gold reserve held by the Bank of England and of checking any protracted movements of gold importations by foreign nations, in so much as an advance in the Bank rate adjusts the rates of foreign exchange to a point where operations of this nature become unprofitable.

9. Invites and attracts the deposits of foreign banks with London correspondents as an advance in the Bank rate to a figure in excess of the earning capacity at home induces continental money lenders to seek the London market for investment of their funds.

10. Indirectly has a tendency to depress or advance the values of stocks listed on the New York Stock Exchange—an advance in the Bank rate causing a decline in stock values, and a reduction in the Bank rate usually having the opposite effect, because the values of stocks are largely

dependent upon the monetary conditions obtaining in New York, and as New York bankers in periods of stringency nowadays resort to relieve the situation by issuing Finance Bills drawn upon English bankers, the Bank of England rate indirectly either facilitates or precludes their course of action.

REVIEW

What effect has the interest rate on exchange quotations?

What is the bank rate in London and what relation has it to the foreign exchange rate and the movement of gold? What is the bank rate in: France, Berlin, New York?

Discuss the market rate of discount; the retirement rate.

Show how the Bank of England rate is an important factor in determining rates of exchange.

CHAPTER XIII

GOLD SHIPMENTS

1. *Gold or specie points.*—The use of bills of exchange as shown in Chapters IV and VI eliminates, in a great measure, the expense and trouble of shipping gold in payment of international indebtedness. The necessity of importing gold arises only when the seller of a bill of exchange finds the price offered for his bill lower than the expense entailed in purchasing gold in the foreign country and importing it. Similarly, gold is usually exported when a purchaser finds it cheaper to ship gold to his foreign creditor than to pay the exchange rate demanded.

In explaining exchange fluctuations, we have, for the sake of simplicity, thus far spoken as if a solitary seller or purchaser of exchange undertook the import or export of gold respectively whenever the rate became unsatisfactory. In practice, however, the shipment of gold is confined almost entirely to bankers and other large dealers in foreign exchange who have special facilities at home and abroad for undertaking such shipments. The merchant, therefore, or even the average banker, is not concerned in gold shipments, tho he is concerned in the rate of exchange which the shipments are intended to adjust.

The cost of a shipment of gold between any two

countries can only be estimated, as it varies with the size of the shipment and the facilities and knowledge possessed by those who undertake it. Sometimes special concessions are offered by a government in order to encourage the importation of gold into a country.

2. *Gold values, London and New York.*—The operation and cost of gold shipments between New York and the various financial centers of Europe can be explained by reference to transactions with London, with which point the majority of gold shipments occur.

Gold shipments between London and New York are made in several forms:

	Value in London per Ounce	Value in New York per Ounce
Fine gold bars	£4.24771	$20.671835
Gold bars—900 fine—Eagles—900 fine	3.82294	18.60465
Standard gold bars—916⅔ fine—Sovereigns	3.89375	18.949182

The Royal mint in London pays the above prices a fortnight after the gold is delivered to them. The Bank of England pays on delivery at the rate of 77s. 9d. per ounce standard, the difference of 1½d. corresponding to about four per cent interest on the fourteen days' delay exacted by the Royal mint.

The Bank of England will, as a rule, buy eagles and other coins (minted .900 fine) according to their full weight at the rate of 76s. 4½d. and sell them (if in stock) at 76s. 9d.

The United States mint assay office in New York pays 90 per cent of the above prices on delivery of the

gold, and the remaining 10 per cent, less a small melting charge of 4 cents per $100, a few days later when the melting and assaying have been completed.

Gold sells according to weight and degree of fineness and it should be noted that the values of eagles and sovereigns quoted above, are .900 and .916⅔, respectively, of the value of fine gold bars. Gold bars are seldom absolutely pure by a few thousandths, but their value is easily established. A gold bar, for instance, that assays .995 fine is worth $\frac{995}{1000} \times$ 20.671835 or $20.568476 per ounce. The London price of gold is always based on standard gold 916⅔ fine, at £3: 17: 10½ per ounce (£3.89375).

The ratio of the London prices to those of New York are as 1: 4.86656; in other words, divide a New York price by the corresponding London price and the quotient is the mint par value of the sovereign in dollars. Reverse the calculation and you get the par value of the dollar in English money.

3. *Gold shipments from New York.*—The following description of a shipment of $1,000,000 in gold from New York to London is taken from Dean Joseph French Johnson's "Money and Currency" and will serve as an example of how a shipment of gold is made under normal conditions.

During the last quarter of the nineteenth century the cost of shipping gold from New York to London fell from three to two cents per pound sterling. The charges for freight and insurance both declined, while the increased speed of transatlantic liners reduced the loss on account of interest.

The following figures, showing the cost of shipping $1,000,000 in gold from New York to London, were furnished by the representative of one of the largest New York banking houses:

Invested in fine bars, 23,200,000 gr. (48,375 oz.)	$1,000,000.00
Assay office premium on bars, 4 cents per $100	400.00
Freight, 5/32 per cent	1,562.50
Insurance, 1/16 per cent	625.00
Packing and cartage	70.00
Total outlay	$1,002,657.50

The Bank of England's "price" of gold varies from 77s. 9½d. to 77s. 10½d. per ounce, English standard, 916⅔ fine. The mint coins an ounce of gold, English standard, into 77s. 10½d.; but the Bank of England, with which it is the custom of bullion owners to deal, usually pays a fraction less than this sum, thus saving itself from loss of interest while the bullion is being coined. It is assumed below that the bank pays 77s. 10d. per ounce.

48,375 oz. fine = 52,772.7 oz., 916⅔ fine.

52,772.7 oz. @ 77s. 10d	£205,374
Deduct sundry expenses	4
Net receipts in London	£205,370
Cost of sovereign (1,002,657.50 ÷ 205,370)	$4.8822
Mint par in United States	4.8665
Cost of shipment per sovereign	$ .0157

The reader will notice that no loss on account of interest is included in the foregoing. The New York banker who furnished the figures held that no such item was involved, for he sold sterling exchange as soon as he made a shipment, and so was never out of money in consequence. If we include interest for ten days at three per cent ($835.54), we raise the cost of the shipment to $.0197 per sovereign.

4. *Gold shipments from New York to Ottawa.*— At the beginning of the war, New York found itself with an unprecedented floating indebtedness to Europe, estimated at from $250,000,000 to $300,000,000.

Exchange became utterly demoralized. Cables on London rose to $5, to $6.50, and finally to $7 and remittances became impossible. On August 14, 1914, in order to ease the New York exchange situation, the Bank of England signified its willingness to accept payments in London on New York account against the deposit of gold in Ottawa, thus eliminating the danger and expense of ocean shipments in time of war. From $100,000,000 to $150,000,000 were sent from New York to Ottawa under this arrangement and sterling exchange was thereby stabilized until the fall shipments of wheat, cotton, etc., produced their effect.

The deposits were accepted in Ottawa at the fixed price for gold bars of 77s. 6d. per ounce standard, and for eagles 76s. 0½d. per ounce, equivalent to rates of $4.89 and $4.893, respectively per pound sterling.

Under normal conditions the Bank of England pays in London, 77s. 9d. per ounce for standard bar gold (or at the rate of $4.8744 per £) and buys eagles at about 76s. 4½d. per ounce (or at the rate of $4.8719 per £), and so the difference between the Ottawa and London prices of 3d. or 4d. per ounce was most reasonable, considering it would barely cover the cost of shipment to London under normal conditions. No particulars are available as to the dates on which the gold was returned to New York after sterling exchange became favorable to the latter. The greater part of the deposit, of course, was shipped on account of the Bank of England itself, tho some of it was re-

leased to London and New York bankers against payments made in London.

For instance, in the beginning of June, when cables were $4.78875, the Bank of England released eagles in Ottawa against a payment in London at the rate of 77s. 6½d. per ounce, equivalent to the rate of $4.7985 [1] and, at the end of June, with cables at $4.7725, standard gold bars were released at 79s. 1d. per ounce, equivalent to the rate of $4.7922.[2]

At first glance the above transactions do not appear to be very profitable to the Bank of England as it paid $4.89 for standard gold in August, 1914, and sold it at $4.7922 in June, 1915, while eagles were sold at $4.7985 which cost $4.8930, but we must remember that these quotations are movable exchange (dollars and cents per pound) to London, consequently the Bank of England followed the old rule "buy high, sell low"; and practically made a profit of ten cents per pound sterling.

To make this clear let us take the hypothetical case of a New York banker who transferred £10,000 to England via Ottawa in August, 1914, and transferred it back in June, 1915.

Aug. 13, 1914.—For the £10.000 paid to his account in London, he delivered in Ottawa in full weight eagles	$48,930
June 5, 1915.—For £10.000 deposited in the Bank of England, he will receive at Ottawa in eagles	47,985
Gain to the Bank of England of	$ 945

Had the transfer been made by cable at 4.78⅞ the

[1] 372.093 ÷ 77.5417.
[2] 378.98364 ÷ 79.083.

banker would have received only $47,887.50, so the Bank of England saved him $97.50 on the transaction.

5. *Shipments from Ottawa.*—The actual returns of several shipments made to New York from Ottawa against payments in London during the summer of 1915 are of interest.

1. Purchase of eagles in London by arrangement with the Bank of England to release by cable the equivalent in Ottawa for shipment to New York:

June 2, 1915.—11,666.915 ounces of eagles, purchased at 77s. 6¼d. per ounce ($4.7985 per £) delivery in Ottawa for shipment to New York			£45,233–12–0
3 days' interest at London call rate, 2%, $35.57			7– 8–7
Total cost in London			£45,241– 0–7
June 5, 1915.—Amount received in New York, $217,090		$217,090	
(Average weight $10,000 eagles, 537.423 ounces)			
Less express charges at 75c	$162.90		
Custom fee	2.10	165	
Sterling equivalent of		$216,925	
at 4.78⅞ rate on June 2 in London for cable transfer			£45,298–18–0
Net profit on transaction			£ 57–17–5

The Bank of England charged for the gold at the rate of $4.7985 per pound sterling, the net cost delivered in New York was $4.79487 per pound sterling, and the net amount realized by sale of a cable in London was $4.78875 per pound sterling, yielding a net profit of .00612 per pound sterling or $61.20 per £10,000. In other words, each dollar cost the purchaser 4s. 2.053d., which he resold at 4s. 2.117d. or a profit of about one-sixteenth of a penny per dollar.

2. Purchase of bar gold in London, by arrange-

ment with the Bank of England to release by cable the equivalent in Ottawa for shipment to New York:

September 23, 1915.—10,988.101 ounces of standard bar gold purchased at 80s. 1½d. per ounce ($4.73 per £) delivery in Ottawa for shipment to New York		£44,021– 1–5
Interest at 4½% for five days (Sept. 23–28)		27– 2–9
Interest at 4½% on £996–11–0 ($4,693.75 at 4.71) for seven days		17–3
Total cost in London		£44,049– 1–5
September 28, 1915.—Paid by the U. S. Assay office on delivery	$203,500.00	
October 5, 1915.—Balance, less assay charges, $22.27	4,693.75	
Net amount from the U. S. Assay office (being at the rate of $18.919182 per ounce)	$208,193.75	
Less express charges, etc	150.05	
	$208,043.70	
Sterling equivalent at 4.71 cable rate on September 28, in London		£44,168–14–7
Net profit		£ 119–13–2

The Bank of England released the bars at the rate of $4.73, the net cost of same delivered in New York was $4.7228, and the net amount realized by the sale of a cable on London was $4.71 per pound sterling, yielding a net profit on the transaction of 1.28 cents per pound sterling.

6. *Gold imports during the war.*—Numerous examples of gold shipments can be found in any book of foreign exchange, but the following examples of shipments made from London during the year 1915 are of interest. It should be noted in this connection, that, notwithstanding the abnormal conditions produced by the war, the Bank of England has not ceased to redeem its notes in gold; anyone holding Bank of

England notes can convert them into gold, and, if willing to take the risk of shipping, pay with them a debt abroad. Great Britain has not yet found it necessary to prohibit the export of gold to neutral nations.

Shipment of £100,000 in sovereigns from London to New York:
September 29, 1915.—Shipped from London.
October 12, 1915.—90% paid by Assay Office in New York....$435,500.00
October 18, 1915.—10% paid by Assay Office..... 49,867.53

Representing 25,613.96 oz. standard gold at $18.949182 per ounce		$485,367.53
Less:		
Assay charges	$ 27.04	
Interest @ 3½% for 13 days on $435,500....	542.30	
Interest @ 3½% for 19 days on $49,867.53....	90.83	
Freight and insurance	6,543.82	7,203.99
		$478,163.54
Cable rate on September 29th, 4.73¼		473,250.00
Net profit on the transaction		$ 4,913.54

Delivery of the sovereigns was taken by tale and not by weight from the Bank of England, consequently, owing to the presence of light sovereigns, the shipment weighed only 25,613.96 ounces (instead of 25,682.18 [1] ounces had they been full weight), and netted at the assay office only $4.85367 per pound sterling instead of $4.86656, or a loss of 1.289 cents per pound sterling. Even with this handicap the shipment netted a handsome profit.

[1] The difference, or remedy as it is called, between the mint weight (123.274 grains) and the least permissible weight of the sovereign (122.50 grains) is .774 grains or roughly ⅝ per cent. Under normal conditions the Bank of England seldom pays out sovereigns averaging less than 256.20 ounces per £1,000, that is, .6218 ounces or about ¼ per cent below full mint weight. (256.8218 — 256.20 = .6218.) The remedy or variation in weight on newly coined sovereigns permitted to the mint is .2 grains.

Shipment of standard bar gold from London to New York:		
September 1, 1915.—5,282.157 ounces standard gold purchased at 77s. 11d. per ounce [1]		£20,578:8:1
September 10, 1915.—90% of value of above paid by Assay office in New York on delivery		$ 89,000.00
September 14, 1915.—Balance 10% paid by Assay office		11,097.18
Total amount paid by Assay office for the above bars, assaying 1842.20 oz. fine gold at $20.671835		$100,097.18
Less:		
Assay charges	$ 15.59	
Freight and insurance	1,389.94	
Interest @ 3½% for 9 days on $89,000 (Sept. 1–10)	77.00	
Interest @ 3½% for 13 days on $11,097.18 (Sept. 1–14	13.81	1,496.34
Net proceeds received in New York		$ 98,600.84
£20,578-8-1 at cable rate Sept. 1, $4.56		93,837.62
Net profit on transaction		$ 4,763.22

Standard gold at 77s. 11d. per ounce is equivalent to $4.86394 per pound sterling (378.98364 ÷ 77.917). The proceeds netted $4.79148 per pound sterling which, with cable on September 1, at $4.56, showed a profit of 23.148 cents per pound sterling.

As a general rule, it costs less to export gold than to import it for the reason that while in transit little or no expense for interest is involved in the former transaction. Exports occur when rates are high and the exporter can sell his demand drafts and purchase and ship his gold simultaneously, the one practically offsetting the other on their arrival in London, or other destination. In the case of an import of gold, however, the importer has to pay for the gold seven or ten

[1] Altho the Royal mint is obliged by law to pay £3 17s. 10½d. per ounce standard for all gold offered, it has no fixed selling price; the latter varies with the market.

days before he can realize on the proceeds in New York. He is, therefore, obliged to forego the use of the amount while gold is in transit.

REVIEW

When is it necessary to export gold? When is it imported?

In what forms are gold shipments made? How do the Bank of England and the United States Mint Assay Office at New York respectively, buy coins?

Show how the Bank of England relieved the New York exchange situation at the beginning of the European war.

Why does it usually cost less to export than to import gold?

CHAPTER XIV

STERLING EXCHANGE

1. *London market.*—It will give a much clearer understanding of the operations of foreign exchange to study in some detail the principal exchange markets, to learn the exchange practice in each market, and, having reviewed the principal financial centers, to explain how exchange is effected with other parts of the world. It must already be evident to the reader that in foreign exchange the London market is dominant and naturally calls for first consideration. New York will not, of course, call for special treatment at this point as the body of this volume explains American exchange practice. Special note, however, must be taken of the operations of Paris, Berlin and Amsterdam, with briefer mention of other centers and countries where exchanges are less highly developed.

The insular position of Great Britain, the density of her population, the early development of manufacturing enterprises, the possession of vast coal resources gave her at an early date a preeminent position in the world's commerce from which she cannot be easily dislodged. With her enormous commerce and her monetary system firmly and long established upon the gold basis, she has naturally come to occupy a sim-

ilarly prominent place in the financial adjustments which international commerce renders a necessity; namely, in foreign exchange. Thus, the monetary system of Great Britain based upon the pound sterling is more widely known than any other.

2. *Monetary system.*—An understanding of the monetary system of another country is the prerequisite of any knowledge of what exchange procedure really means. The illustrations given thruout this volume will, however, dispense with the need of any extended discussion of English money.

As already stated the monetary unit is the pound sterling represented by a coin known as the sovereign, which consists of 123.27447 grains of gold 916⅔ fine, and is thus the equivalent of 113$\frac{1}{623}$ grains or 7.322385 grammes of pure gold. The gold coins of common circulation are the sovereign and the half sovereign. Silver coins of limited legal tender are in circulation in denominations of 1, 2, 2½ and 5 shillings and sixpence and threepence or ½ and ¼ of a shilling. One pound of standard silver (925 fine) is coined into 66 shillings; a shilling, therefore, weighs 87.2727 grains of standard silver or 80.7272 grains of pure silver.[1] Gold coins in

[1] British quotations for bar silver are quoted so many pence per *ounce standard,* so when silver is quoted at 24½ pence per ounce, the pound standard costs 24s. 6d. (294 pence), which divided by 66 gives the intrinsic value of the shilling 4$\frac{5}{11}$ pence. American quotations for bar silver are quoted so many cents per ounce of *pure silver;* therefore the London quotation for bar silver at, say, 25 pence would correspond with $25 \times \frac{1000}{925} = 27.072$d. for 1 ounce of pure silver or in American money on the basis of 49.316d. per dollar, $\frac{27.027}{49.316} = 54.80$ cents.

good condition are legal tender in Great Britain to any amount, silver coins to the amount of £2, and coppers to the amount of 1 shilling. When the sovereign falls below the weight of 122.50 grains it loses its legal tender quality. Such deterioration of the coinage thru use is, however, rare, as the Bank of England under normal conditions issues no sovereigns which are below 122.976 grains in weight. This rule promotes the retirement of light weight coins.

3. *Paper money.*—The Bank of England issues notes in denominations of 5, 10, 20, 50, 100, 200, 500 and 1000 pounds. These notes are payable on demand at the Bank, and elsewhere are full legal tender. In effect they are practically the equivalent of the United States gold certificates, since all but a small portion of the issue of the Bank (£18,450,000) must be covered by gold, pound for pound. Unlike the national banks in the United States, the Bank of England and most foreign banks, can hold their gold in the form of foreign gold coins. Hence, when gold must be exported to the United States from foreign countries, there are large reserves of the coin available for the purpose.

In the United States, gold serves mainly the purpose of bank reserves and very little gold coin is in

The English price per ounce standard silver multiplied by the constant 2.192 will give the New York equivalent value per ounce of pure silver, and the New York price per ounce of pure silver multiplied by the constant .4562 will give the English parity per standard ounce, thus 54.80 cents × .4562 = 25 pence. 25 × 2.192 = 54.80 cents.

circulation. In Great Britain, on the other hand, the absence of any money except gold between the denominations of five shillings and five pounds forces the actual circulation of a considerable part of the monetary stock. In August, 1914, when there was an unusual strain on the gold supply and great difficulty in obtaining gold coins for current use, the British Government issued Treasury notes in denominations of £1 and 10 shillings. These are also legal tender.

Outside of London there are a few banks permitted to issue notes, a survival of an older system of banking. These notes are generally of small denomination, and as there is a charge for collection in London, their circulation is purely local.

4. *Coinage of gold.*—While, as we have seen, the exchanges between two different gold standard countries are determined in large part by the relation of the amount of pure gold in their respective coins, the mint par, the shipping points for gold depend upon the ease with which the gold coin or bar gold of one country can be made available for payments in the other. Hence the necessity of reckoning with the price which is paid for gold by the mint or by the banks of the other country and the terms of payment.

Great Britain coins 1,869 sovereigns from 40 lbs. troy of standard gold 11/12 fine, and the value of an ounce of standard gold is therefore £3 17s. 10½d. (77.87465 shillings); of an ounce of pure gold £4 4s. 11.45d. (84.95416 shillings); and an ounce of mint or eagle gold £3 16s. 5½d. (76.458744 shillings).

The United States coins 800 gold dollars from 43 ounces of mint gold 9/10 fine and the value of an ounce of mint or eagle gold as it is called, is therefore $18.60465, of an ounce of *pure gold* $20.671835, and of an ounce of *standard gold* $18.949182. These are also the Canadian values.

The Bank of England pays immediately for gold at the rate of 77s. 9d. per ounce standard.

The Royal mint in London and its four branches in Melbourne, Perth, Sydney and Ottawa, take any quantity of gold for coinage, which is free, but deliver the corresponding coins—at the rate of 77s. 10½d. per oz. standard—a fortnight after the receipt of the gold.

The difference of 1½d. corresponds to about 4 per cent interest for 14 days on the ounce value.

Under normal conditions the Bank of England pays £3 17s. 9d. per ounce for standard bar gold (or at the rate of £1 for $4.8744) and buys United States eagles at about £3 16s. 4½d. per ounce (or at the rate of £1 for $4.8719) but these prices occasionally vary.

On August 13, 1914, the announcement was made that the Bank of England was willing to purchase gold at Ottawa, thru the Dominion Government, and to pay cash in London against same at the fixed price for gold bars at 77s. 6d. per ounce standard and United States eagles at 76s. 0½d. per ounce. It is useful to know how to arrive at the equivalent dollar rates.

In the case of standard gold, divide $18.949182 by the London price per ounce in pounds and decimals of a pound. $\frac{18.949182}{£3.875} = 4.8901$ per 1 pound sterling at £3 17s. 6d. per

ounce standard gold. Or a rough calculation may be made by adding .0026 cent to par ($4.8666) for each half penny *decrease* from 77s. 10½d.

$$4.8666+(.0026\times 9) \text{ or } .0234=\$4.8900$$

For eagle or United States *mint* gold, divide $18.60465 by the price per ounce (£3 — 16 — 0½)

$$\frac{18.60465}{£3.802} = \$4.8932$$

or add .0027 cent to par for each half penny *decrease* from 76s. 5½d.

$$4.8666 + (10 \times .0027) \text{ or } .027 = \$4.8936.$$

5. *Stamps and interest.*—Illustrations in earlier chapters have noted the fact that due allowance must be made for the stamp duties imposed by foreign countries. The rôle that interest plays has been fully discussed, but in the actual work of transacting foreign exchanges an exact knowledge of interest usage is of value.

The English stamp tax on bills of exchange amounts to one shilling for every £100, or nearly a quarter of a cent per pound ($0.0024). In exchange calculations an allowance for stamps is made of ½₀ of 1 per cent. Checks, three-day sight bills and under, require only a penny stamp no matter what the amount.

In computing interest three days of grace must be allowed, tho of course such a rule does not apply to checks or sight drafts. Interest is calculated by taking the exact number of days and the year at 365 days.

6. *How London quotes exchange.*—Quotations

on South America, China, India, Russia, Portugal and Spain are given in pence per foreign unit, while all other countries are quoted in foreign money per pound sterling. Quotations on South Africa, Australia and other British colonies using the pound sterling are quoted at a discount or premium on £100.

Foreign exchange quotations in London are published in two forms:

(a) "Foreign Exchanges" or "Rates of Exchange." These rates are published daily in the London papers and give the quotations for checks and bills on London obtaining at the various foreign centers, these rates being cabled daily or oftener if changes are frequent.

(b) "Course of Exchange" or in "street" parlance "On Change Table." The quotations are published every Wednesday and Friday and represent the rates which English brokers pay for drafts drawn on the various foreign centers. In other words, "Foreign Exchanges" give the rates that foreign exchange brokers are paying for drafts drawn on foreign centers.

7. *Rates of Exchange.*—The following taken from the *London Times* of 17th July, 1914, is a specimen of the "Rates of Exchange." It generally appears with two other columns giving the quotations for the two previous days. These are replaced here by explanatory remarks:

RATES PAID BY FOREIGN CENTERS FOR BILLS ON LONDON

Paris—check	25f. 16¾–17¾c.	Francs and centimes per £1
Brussels—check	25f. 29½–30½c.	Francs and centimes per £1
Berlin—sight	20m. 40–50pf.	Marks and pfennigs per £1
Berlin—8 days	20m. 46½pf.	Marks and pfennigs per £1
Vienna—sight	24kr. 16–18h.	Kronen and heller per £1
Amsterdam—sight	12fl. 11¾–12¼c.	Florins and cents per £1
Italy—sight	25L. 26–28c.	Lire and cents per £1
Switzerland—sight	25f. 18¼–19¼c.	Francs and cents per £1
Madrid—sight	26p. .05–15	Pesetas to £1
Lisbon—sight	46 15/16–46 15/16d.	Pence to 1 milreis
Petrograd—3 months	95r. 10k.	Roubles and kopeks per £10
Petrograd—sight	95r. 75–85k.	Roubles and kopeks per £10
Christiania	18kr. 23–26	Kroner and ore per 1
Copenhagen	18kr. 23½–26½	Kroner and ore per 1
Stockholm	18kr. 23–26	Kroner and ore per 1
Bombay T. T.[1]	1/3 31/32d	Shillings and pence per 1 rupee
Calcutta T. T.[1]	1/3 31/32d	Shillings and pence per 1 rupee
Hong Kong T. T.[1]	1/10⅝d	Shillings and pence per 1 dollar
Shanghai T. T.[1]	2/5⅝d	Shillings and pence per 1 tael
Singapore T. T.[1]	2/3 15/16d	Shillings and pence per 1 dollar
Yokohama T. T.[1]	2/0⅜d	Shillings and pence per 1 yen
Alexandria	97⅝pi.	Piastres per £1
Rio de Janeiro, 90 days[2]	15 15/16d.	Pence per 1 milreis
Valparaiso, 90 days[2]	9¾d.	Pence per 1 peso
Buenos Aires, 90 days[2]	47 1/16d.	Pence per 1 peso or dollar (gold)
Montevideo, 90 days[2]	51 3/32d.	Pence per 1 dollar
New York—Cable transfers.	$4.87 7/16–1 1/16c.	Dollars and cents to £1

[1] Telegraphic transfer.
[2] These rates are telegraphed on the day preceding their receipt.

Arranged as above the table calls for little comment.

The reader should constantly bear in mind that these rates are quoted in foreign markets for bills drawn on London and that in the case of "movable exchange," i. e., foreign money per pound sterling, high rates are favorable to Great Britain, as more foreign money is received for a sovereign while low rates are unfavorable. Movable exchange in London is of course fixed exchange in the other country, and vice versa.

In the case of "fixed exchange," i. e., pence for foreign money, the position is reversed as the higher rate gives more pence per foreign unit or, in other words, less foreign money is received for a sovereign. Fixed exchange in London is movable exchange in the foreign country. The quotation $4.86 per pound

is movable exchange in London and fixed exchange in New York.

In many instances it will be noted that two rates are quoted. The lower rate is the buyers' price and the higher rate the sellers' price. The real or trading price is generally between the two. The extent of the margin between the two quotations depends upon the volume of the transactions and whether or not the buyers or sellers are in the majority.

The "Foreign Exchange Table" is the more important, as far more bills are drawn on London than London draws upon other countries. These quotations serve as a barometer of international exchange and are very closely watched by financial men.

In studying any foreign exchange quotations it is well to bear in mind the following simple rules:

Movable Exchange. Foreign money per home unit. Buy high, sell low, the better the bill the lower the rate, the longer the currency the higher the rate.

Fixed Exchange. Home money per foreign unit. Buy low, sell high, the better the bill the higher the rate, the longer the currency the lower the rate.

8. *Course of Exchange.*—Every Tuesday and Thursday, bankers and foreign exchange dealers meet at the Royal Exchange in London to buy and sell bills drawn on foreign centers and on the following day the papers publish the prices at which bills have changed hands.

The following table is taken from the *London Times* of July 17, 1914, and as in the case of the

Rates of Exchange previous quotations have been replaced by explanatory notes.

COURSE OF EXCHANGE

SHOWING RATES PAID BY LONDON BANKERS FOR BILLS DRAWN ON FOREIGN CENTERS

Amsterdam, etc.—checks...	12.23⅜–12.25⅜	Florins and stivers 1 per £1
Amsterdam, etc.—3 months.	12.43⅜–12.51⅜	Florins and stivers per £1
Antwerp and Brussels.....	25.50–25.55	Francs and cents per £1
Hamburg	20.63–20.67	Marks and pfennigs per £1
Berlin, etc.	20.63–20.67	Marks and pfennigs per £1
Paris—checks	25.17½–25.20	Francs and cents per £1
Paris—3 months	25.36¼–25 41¼	Francs and cents per £1
Marseilles—3 months	25.36¼–25.41¼	Francs and cents per £1
Switzerland—3 months ...	25.37½–25 42½	Francs and cents per £1
Austria—3 months	24.41–24.45	Kronen and heller
Petrograd and Moscow—3 months	24½–24¾	Pence to 1 rouble
Genoa—3 months	25.56¼–25.61¼	Lire and cents per £1
New York—60 days	48 11/16–48 13/16	Pence per $1
Madrid—3 months	45 1/16–45 3/16	Pence per 5 pesetas
Lisbon—3 months	45 9/16–45 13/16	Pence per 1 milreis
Oporto—3 months	45 9/16–45 13/16	Pence per 1 milreis
Copenhagen—3 months ...	18.48–18.52	Kroner and ore per £1
Christiania—3 months	18.48–18 52	Kroner and ore per £1
Stockholm—3 months	18.48–18.52	Kroner and ore per £1

1 One florin = 20 stivers.

It will be noted that these rates are closely in sympathy with those given in the above Foreign Exchange Table and represent the price that London was willing to pay for bills on these centers.

With one or two minor exceptions the quotations conform to those in the summary of Foreign Exchanges. This table, however, is dated before the European war which commenced in August, 1914. Since then the discrepancies have apparently disappeared and the quotations in the two tables are now practically uniform. New York and Spain are now quoted in foreign units per pound sterling instead of pence per foreign unit. Russia is quoted in roubles per £10, and Holland in florins and cents instead of florins and stivers.

Where two rates are quoted for long bills in the Course of Exchange the better price is for bankers' bills and the lower price for ordinary commercial bills.

The short or check rate refers not only to checks and demand items but also to bills payable at eight days or less. When two rates are quoted for checks, the better rate is for demand items and the lower rate for short date bills. Movable exchange rate for long paper is quoted higher than short exchange; in other words, more foreign money will be received for a sovereign if payment in the foreign country is deferred thirty or sixty days, whereas, the reverse is true of fixed exchange quotations, the longer the payment is deferred the less the foreign unit costs.

9. *American quotations.*—Sterling rates are quoted in the United States and Canada at so many dollars and cents to the pound sterling, $4.85, $4.86½ and so on. There are two methods of progression: namely, advancing by eighths of a cent $4.85, $4.85⅛, $4.85¼, and advancing by five one-hundredths of a cent per pound (.05 cent), $4.8510, $4.8515, $4.8550 and so on. The latter is, of course, the closer quotation and is used in market transactions.

10. *Conversion.*—In actual practice conversions are generally made with the aid of exchange tables, but every operator should be able to make the necessary calculations for himself.

Sterling currency is non-decimal:

£1 = 20 shillings = 240 pence = 960 farthings
.05 = 1 shilling = 12 pence = 48 farthings
.004⅙ = 1 pence = 4 farthings

It will be found more convenient for purposes of calculation to reduce all shillings and pence to the decimal of a pound.

To reduce shillings and pence to the decimal of a pound, multiply the shillings by .05, and the pence by .004⅙. The reason of this is apparent.

£1 = 1.
1s = .05 of a pound.
1d = .004166 of a pound or .004⅙.

If only an approximation to the nearest penny is desired, multiply the pence by .004, and add one to the result if over twelve, and two if over thirty-two.

Example:

Reduce £15. 8s. 7d. to pounds and decimal:—

15	£15.00
.05x8	.40
.004⅙x7	.029⅙
	£15.429⅙

To reduce decimals of a pound to shillings and pence, divide the first two numbers by five for the shillings, and the remainder by four for the pence (to be exact, divide by .004⅙) or $\frac{.025}{6}$

The following table will be found useful:

Shillings	£	Shillings	£	Pence	£	Pence	£
1	.05	11	.55	1	.00416	11	.04583
2	.10	12	.60	2	.00833	12	.05000
3	.15	13	.65	3	.01250	1/32	.00013
4	.20	14	.70	4	.01666	1/16	.00026
5	.25	15	.75	5	.02083	3/32	.00039
6	.30	16	.80	6	.02500	1/8	.00052
7	.35	17	.85	7	.02916	1/4	.00104
8	.40	18	.90	8	.03333	1/2	.00208
9	.45	19	.95	9	.03750	3/4	.00312
10	.50	20	1.	10	.04166		

The rules for conversion are

English money into dollars: Multiply the amount in pounds by the rate per pound.

£2,500 at 4.8635 = 2,500 × 4.8635 = $12,158.75

Dollars into English money: Divide the amount in dollars by the rate per pound.

$2,500 at 4.8635 = $\frac{2,500}{4.8635}$ = £514.0331 = £514. 0. 8.

Since £15 is equal to $73 at par ($4.8666), sterling amounts may be converted into dollars at par by multiplying by $^{73}/_{15}$, and dollar amounts may be converted into pounds sterling at par by multiplying by $^{15}/_{73}$.

11. *Profits.*—When a profit of so much *per pound* is desired, no calculation is necessary. A cent advance per pound means one dollar per £100 or ten dollars per £1,000; a point advance per pound (.01 cent) gives ten cents on £1,000 and five points (.05 cent) per pound means a profit of 50 cents per £1,000. One eighth of a cent advance gives 12½ cents per £100.

When the profit is figured on the *dollar value* it will be, roughly, double the advance in the rate (4.87 × 2, or double the value of a pound, being nearly $10). An advance of *five* points means a profit of 10¼ cents per $1,000, and an advance of fifty points (say $4.8500 to $4.8550) gives a profit of only $1.03 per $1,000. One-eighth of a cent advance means a profit of 26 cents per 1,000.

On ordinary transactions a profit of one-eighth to one-quarter of 1 per cent should be made, or from sixty points to a cent and a quarter a pound, according to the nature and amount of the transaction. On

small transactions two or three cents per pound should be charged in order to obtain a minimum.

12. *Purchase of bills of exchange.*—Practically all exchange business in sterling is transacted by cable or by demand and sixty-day bills, and quotations are generally furnished accordingly. Occasionally, however, it is necessary to make a quotation on some special dating, such as 30 or 90 days, and examples are therefore given below.

Making the allowances for stamps already noted and calculating interest at the appropriate rate the following table will be found serviceable:

STERLING EXCHANGE INTEREST
TABLE FOR USE IN PURCHASING BILLS OF EXCHANGE

Rates Per Cent	3 Days	10 Days	33 Days	63 Days	73 Days	93 Days	123 Days
Basis	$485.	$485.	$485.	$485.	$485.	$485.	$485.
1/16	.002	.008	.027	.052	.061	.077	.102
1/8	.005	.017	.055	.105	.121	.154	.204
1/4	.010	.033	.110	.209	.243	.309	.409
1/2	.020	.066	.219	.419	.485	.618	.817
3/4	.030	.100	.329	.628	.728	.927	1.226
1%	.040	.133	.439	.837	.970	.236	1.634
2%	.080	.266	.877	1.674	1.940	2.472	3.269
3%	.120	.399	1.316	2.511	2.910	3.707	4.903
4%	.160	.532	1.754	3.349	3.880	4.943	6.538
5%	.199	.664	2.193	4.186	4.850	6.179	8.172
6%	.239	.797	2.631	5.023	5.820	7.415	9.807
Stamps	.24	.24	24	.24	.24	.24	.24

The above figures are calculated on the basis of $485 per £100 and 365 days per year. Stamps one shilling per £100 or 1/20 of 1%.

Examples showing how the rates for different kinds of bills are calculated (as a matter of convenience the calculations are based on £100).

What price can be paid for:—

(A) Commercial bill on London, draft drawn payable three days after sight, no documents attached ("Clean Bill")?

New York rate for demand check on London		$487.00
Stamp duty (1d.) not figured.....	00	
Discount 6 days, 3% (private rate)	24	.24
		$486.76
Nearest commercial rate.....		$4.8675

(B) Sixty-day sight draft on London Bank, documents against acceptance?

New York rate for demand check on London		$487.00
Discount, 63 days, 3½%	$2.93	
Stamp duty, 1/20%.....	.24	3.17
		$483.83
Nearest commercial rate.....		$4.8385

(C) Ten-days sight draft on a merchant, documents deliverable against acceptance?

New York rate for demand check on London		$487.00
Discount, 13 days, 3¾%.....	.66	
Stamp duty, 1/20%.....	.24	.90
		$486.10
Nearest commercial rate.....		$4.8610

(D) Sixty-days sight draft drawn on a merchant, documents deliverable against payment, covering a shipment of perishable goods?

New York rate for demand check on London		$487.00
Retirement rate of discount at which draft may be retired at option of drawee under rebate.		
63 days, 3%	$2.52	
Stamp duty, 1/20	.24	2.76
		$484.24
Nearest commercial rate		$4.8425

In Canada the above calculations would be affected by the discount or premium on New York funds. In the last example if New York funds had been at 3/64 of 1 per cent discount it would have been necessary to have deducted 23 cents and the Montreal rate for a sixty-day draft would have been $4.84. 1/32 premium would have made the rate $4.8440.

REVIEW

How does the Bank of England, as well as most foreign banks, differ from national banks in the United States with respect to gold reserves? What advantage is gained thereby?

How are exchanges quoted on London, in what forms are they published and when?

What is the value of a foreign exchange table? What rules should be borne in mind when studying it?

How are sterling rates quoted in the United States and Canada? What method of progression is usually followed and why?

How are profits figured on the dollar value?

CHAPTER XV

FRENCH EXCHANGE

1. *Paris market.*—In France, the financial center is Paris and all exchange is quoted in Paris. As a trading center Paris is not so important in comparison with other French towns as London is compared with English cities. But as an investment center Paris far outstrips the other cities, and this gives it its importance in the financial world.

2. *Latin Union.*—In many respects the French monetary system resembles that of the United States. The standard has come to be gold, but in circulation there is a large amount of silver (five-franc pieces) which is accepted, under the law, as unlimited legal tender. France is the chief member of the Latin Monetary Union formed in 1865 in conjunction with Belgium, Italy and Switzerland. Greece became a part of it two years later. Tho known in the respective countries by different names the coins of all members of the Union are identical in weight and fineness and have legal currency thruout the Union. Other states, Spain, Bulgaria, Roumania, Serbia and Finland have the same units but are not associated with the Latin Union thru any monetary treaties.

The original treaty of the Latin Union contemplated a bimetallic system of currency, but soon after the Union was founded the free coinage of silver was suspended, but not before a large quantity of full legal tender five-franc pieces had been coined and put into circulation. The continued coinage of gold, however, has reduced this silver money to a subordinate position.

3. *Monetary system.*—The unit of the French monetary system is the franc of .32258 grammes 900 fine, equivalent to .290322 grammes of pure gold. In the gold coinage it is represented by its multiples 5, 10, 20, 50, and 100 francs, tho coins above 20 francs are rarely seen. The napoleon or twenty-franc piece may be regarded as the standard gold coin.

A kilo of mint gold 900 fine is coined into 155 napoleons or 20 franc pieces or 3100 francs. It follows that the value of 1 kilo of fine gold $= \frac{10}{9} \times 3100$ or fcs. 3444.444, and a franc contains .290322 grammes of fine gold. France has only one mint, situated in Paris, which pays at the rate of fcs. 3437 for one kilo of fine gold for coinage, arrived at as follows:

Value of 1 kilo of mint gold 900 fine.	Fcs. 3100.
Less mint charges per kilo.....	6.70
	Fcs. 3093.30

The value of one kilo of fine gold $= \frac{3093.30 \times 10}{9} =$ Fcs. 3437.

The Bank of France will purchase British gold

coin at the rate of 3149.6668 fcs. per kilo; and Austrian, German, Russian and American coin at Fcs. 3090.5504 per kilo.

The silver five-franc piece weighs 25 grammes 900 fine and contains 22.5 grammes of pure silver. In addition to the five-franc piece there are silver coins of two francs, one franc, and 50 centimes or one-half franc, with minor coins in nickel and bronze. The silver coins are exact subdivisions by weight of the five-franc piece but as the fineness of these coins is only 835, there is less pure silver in five one-franc pieces than in the five-franc piece. Smaller coins than five francs are limited in amount to 7 francs per head of the population. Unlike the five-franc pieces, they have not unlimited legal tender.

Paper money is issued only by the Bank of France in notes of 50, 100, 500 and 1,000 francs.

4. *Stamp duties and interest.*—There is a tax of ten centimes on checks payable in the town in which they are drawn and of twenty centimes if payable elsewhere. Bills of exchange are taxed five centimes per fcs. 100 or fraction. For quotation purposes stamp duties are reckoned as 26 centimes or $\frac{1}{20}$ of 1 per cent on $100 or Fcs. 520.

The law requires a check to be paid within eight days from the date of issue; otherwise it is considered as a bill of exchange. As figures can be easily changed the law requires the date to be written in words.

Quotations for time bills drawn on France are ar-

rived at by adding the interest and stamps to the demand rate. The interest is calculated on a basis of Fcs. 520 equals $100. There are no days of grace, and interest is computed on the basis of 360 days to the year. The following rules will be helpful in determining the rate of interest which is applicable:

Documentary *payment* bills can be discounted with banks at the Bank of France rate.

Documentary *acceptance* bills are usually subject to discount at the Bank of France rate for the last five days and at the private discount rate for the balance of the time.

Discountable bills on first-class commercial firms are discounted at the open market rate.

A reduction in the discount rate of the Bank of France produces a fall in the London price of long bills on Paris and also produces a rise in French exchange.

Drafts on French banks are debited to the account on receipt of the relative *advices*. Interest on the amounts of drafts not promptly presented is therefore a source of revenue to the French bank.

Overdrafts in French accounts are expensive, as the rate of interest on debit balances is usually greater than in the case of any other European account.

French bankers usually charge an extra commission for telegraphic transfers to firms or persons not classified as bankers.

5. *How Paris quotes exchange.*—The usage in French quotations is to give the value of the foreign money in francs. For this purpose 100 units of the foreign money are taken as the basis except in the case of the pound sterling when a single pound is used. On a sight or check basis the quotations are as follows:

London	25.13	francs	per	1	£
Germany	123¾	"	"	100	marks
Latin Union...	99 9/16	"	"	100	francs
Holland	208⅛	"	"	100	florins
Russia	264⅝	"	"	100	roubles
Austria	104 3/16	"	"	100	crowns
New York.....	517½	"	"	100	dollars

6. *French exchange in New York.*—(a) Quotations at so many cents to the franc are used only in minor exchange operations and drafts drawn on small French towns. The conversions in this case resolve themselves into simple problems in multiplication or division.

(b) Franc quotations—So many francs to the dollar are the reverse of all the usual exchange quotations, so that a higher rate means cheaper or lower exchange; i.e., more francs are received for the dollar.

Thus:—

$1,000 at 5.18⅛ will purchase....Fcs. 5181.25
$998.80 at 5.18¾ will purchase....Fcs. 5181.25

Franc quotations advance ⅝ of a centime per dollar or about ⅛ of a cent per franc. It will also be noticed that the advance of ⅝ of a centime in the above illustration corresponds roughly to a decrease of ⅛ of 1 per cent in the dollar value.

For an ordinary transaction this advance of ⅝ of a centime is sufficient, but in large transactions where the quotations are necessarily close, the "shading" is effected by increasing or decreasing the quotation by 1/64 of 1 per cent, etc. This plus or minus fraction does not, however, apply *directly to the rate,* but

means 1/64 or 1/32 of 1 per cent, etc., on the amount of dollars converted at the rate of 518⅛ or 520 as the case may be.

Francs into Dollars at a Fractional Rate:

Fcs. 1,000 at 5.18⅛ equals $193.0037
Fcs. 1,000 at 5.18⅛ plus 1/64 ..... 193.0037
plus 1/64 of 1% .... .0301
equals $193.0338

A *plus* fraction makes the francs cost *more.*
A *minus* fraction makes the francs cost *less.*

Dollars into Francs at a Fractional Rate:

$1,000 at 5.18⅛ equals .....Fcs. 5181.25
$1,000 at 5.18⅛ plus 1/64 .....Fcs. 5181.25
less 1/64 of 1% of itself..... .81
equals .....Fcs. 5180.44

1/64 of 1% of $1,000 is .15⅝ cents which at the above rate equals 81 centimes, to be deducted from the franc amount as above.

A *plus* fraction *decreases* the number of francs received.
A *minus* fraction *increases* the number of francs received.

7. *Fractional quotations.*—It must always be borne in mind that the fraction (plus or minus) refers to the dollar amount only in *any* exchange quotation, a *plus* fraction makes francs (or marks or florins) cost more dollars, a *minus* fraction makes francs (or marks or florins) cost less dollars.

This, at first sight, may appear to be complicated, but a little practical experience and the assistance of the following table should make it quite clear.

			Francs				Dollars
520	plus	1/32	5.19837	520	plus	1/32	.192367
520	plus	1/64	5.19919	520	plus	1/64	.192337
520			5.20	520			.192307

			Francs				Dollars
520	minus	1/64	5.20081	520	minus	1/64	.192277
520	minus	1/32	5.20162	520	minus	1/32	.192247
520	minus	3/64	5.20243	520	minus	3/64	.192217
523⅛			5.23125	523⅛			.1911589

From the above it will be noticed that 1/64 makes a difference of .000030 in the dollars, and .00081 in the francs column. The rate $520 - 1/64$ decreases the value of the francs over the 520 rate by .000030 to .192277 cents but increases the value of the dollar .00081 to Fcs. 5.20081.

The above, or any franc exchange table, will show at a glance how the dollar value decreases as the franc value increases, the franc at 520 being worth 19.2307 cents, while at 523⅛ it is worth only 19.1158 cents. The effect of the fractional shadings should also be studied until they are fully understood. As pointed out above the fraction refers to the dollar amount only; it can be applied to the franc quotation, however, if the sign is reversed.

Thus Fcs. 1000. at $5.20 = \frac{1000}{5.20} =$	$192.307
If the rate was $5.20 + 1/64$ add 1/64 of 1% of $192.307 =	.030
	$192.337

The same result could be obtained by *deducting* 1/64 of 1% of itself from $5.20 = 5.19919$ and proceeding as above $\frac{1000}{5.19919} =$ $192.237

The reason of this is simple, the plus sign of the fractional quotation calls for more dollars, therefore the divisor must be less than 5.20.

8. *Profits.*—When the rate is quoted at so many cents per franc, an advance in the rate of one-hun-

dredths of a cent (.01 cent) would of course mean one cent profit on Fcs. 100, or ten cents on Fcs. 1,000. The rule is to buy low and sell high.

Fcs. 1,000 at .193 would cost $193, and if sold at .1935 would realize $193.50, a profit of 50 cents or nearly ¼ of 1 per cent. An advance of .01 cent in selling corresponds to a profit of about fifty cents per $1,000 or ½₀ of 1 per cent. $1,000 would purchase Fcs. 5,181.35 at .193, but at .1935 $1,000 would purchase only Fcs. 5,167.96, a difference of Fcs. 13.39 or $2.54, representing ¼ of 1 per cent profit on $1,000.

When franc quotations are used, a difference in the rate of ⅝ centime (.625 centime) corresponds approximately to ⅛ of 1 per cent on the dollar value or 12½ cents per $100. The rule is to buy high and sell low. Fcs. 1,000 purchased at 5.15⅝ would cost $193.94, and if sold at 5.15 would realize $194.17, a profit of 23 cents, or ⅛ of 1 per cent on $193.94. If sold at 5.15⅝ + 1/16, $194.06 would be paid (193.94 + .12), and the profit reduced to 1/16 of 1 per cent. $1,000 at 5.15⅝ would purchase Fcs. 5,156.25, but $1,000 would purchase only Fcs. 5,150 at 5.15, a difference of Fcs. 6.25 or $1.25, representing a profit of ⅛ of 1 per cent on $1,000. If the rate was 5.15⅝ + 1/32, the draft would be for Fcs. 5,154.63 or Fcs. 1.61 (31¼ cents) profit.

The profit on bills of exchange is always figured on the rate, not on the amount, as illustrated in the following example:

What price should be paid for a sixty-day bill on Paris,

check rate 5.15⅝, discount rate 3 per cent, to realize a profit of ¼ of 1 per cent?

Check rate	515.625	
Interest 3%, 60 days	2.60	
Stamp 1/20	.26	
Profit ¼ of 1%	1.29	4.15
	519.775	

or $5.20 + \frac{3}{64}$ or $5.19\frac{3}{8}$-$\frac{5}{64}$.

9. *Purchase of French long bills.*—The sight rate is the basis from which the rates for long bills are calculated in New York. It should be carefully noted that, as the quotation is given at so many francs to the dollar, allowances for interest, stamp duty, etc., should be *added* to the sight rate.

When quoted rates are supplemented by fractional quotations, it is necessary to take these fractions into consideration in calculating the rates to be paid for bills, as follows:

Percentage fraction	If minus, add to rate	If plus, deduct from rate
1/64%	Fcs. .00081	Fcs. .00081
1/32%	" .00162	" .00162
3/64%	" .00243	" .00243
1/16%	" .00324	" .00324

Calculation can be simplified by the use of the following French Exchange Interest Table:

Rate per cent	3 days' sight	10 days' sight	30 days' sight	60 days' sight	90 days' sight
Basis	Fcs. 520	520	520	520	520
1/16	.003	.009	.027	.054	.081
⅛	.005	.018	.054	.108	.162
¼	.011	.036	.108	.217	.325
½	.022	.072	.217	.433	.650

Rate per cent	3 days' sight	10 days' sight	30 days' sight	60 days' sight	90 days' sight
Basis	Fcs. 520	520	520	520	520
¾	.032	.108	.325	.650	.975
1	.043	.144	.433	.867	1.300
2	.087	.289	.867	1.733	2.600
3	.130	.433	1.300	2.600	3.900
4	.173	.578	1.733	3.467	5.200
5	.217	.722	2.167	4.333	6.500
6	.260	.867	2.600	5.200	7.800
Stamps	.26	.26	.26	.26	.26

The above figures are calculated on the basis of $100 being equal to 520 francs and 360 days per year.

Example 1, Paris check rate in New York is 5.18⅛, Bank of France discount rate 3 per cent, find the rate for 60-day bills. For convenience the calculation is made on the basis of $100.

Check rate		518.125
Add		..
Stamp duty 1/20 of 1%	.26	
Interest 60 days at 3% ...	2.60	2.86
		520.985

or 5.21¼ + 3/64 arrived at as follows: 520.985 = 521.25 — 00.265, but Fcs. .243 is equivalent to 3/64, and reversing the minus sign the quotation reads 5.21¼ + 3/64.

Example 2, Paris check rate in New York is 5.18⅛-1/64, Bank rate 3 per cent, find the rate for 60-day bills.

Check rate		518.125
Add		
1/64 of 1%		.081
(5.18⅛-1/64)		518.206
Add		
Interest at 3%	2.60	
Stamps 1/20 of 1%	.26	2.86
		521.066

or 5.21¼ + 1/32 (521.25 — .162 or 1/32 = 521.088).

In Canada the calculations would of course be affected by the discount or premium on New York funds; in the above example ($518\frac{1}{8} - \frac{1}{64}$) a premium on New York funds of $\frac{1}{64}$ would make the rate $518\frac{1}{8}$ and a discount of $\frac{1}{64}$ would make it $518\frac{1}{8} - \frac{1}{32}$.

REVIEW

What monetary system was established by the Latin Union? What system did the original treaty contemplate?

How is exchange quoted in Paris? How do franc quotations advance in ordinary transactions and in large transactions?

Discuss fractional quotations.

How is profit on bills of exchange figured? Give an example.

What is the basis from which rates for long bills are calculated in New York?

CHAPTER XVI

GERMAN EXCHANGE

1. *The Berlin market.*—In recent years, the exchange market in Berlin has become of the first importance. This is due to the remarkable expansion of German foreign trade, and the considerable development of German branch banking thruout the world. The former glory of Frankfurt as the financial center of northern Germany has paled before the ascendancy of Berlin.

2. *Money.*—The monetary system of the German Empire as respects the use of gold and silver is not so exclusively gold as that of the United Kingdom, nor is it charged with so much silver as that of France. With the gold standard there are vestiges of the former silver standard in the form of the thaler, but these are not nearly so numerous as the five-franc piece in France, and are, moreover, being withdrawn.

The monetary unit is the gold mark of .39824 grammes 900 fine or .35842 grammes of fine gold. It is represented in the circulation by coins of 10 marks and 20 marks.

A kilo of fine gold will produce in coin 2790 marks. The six German mints accept foreign coins for recoinage but charge 6 marks per kilo of fine gold for expenses in addition to some minor charges.

The Reichsbank will buy foreign gold coins at the following rates per kilo: sovereigns M. 2551.536; gold coins of the Latin Union and of Austria M. 2504.208, coins of the United States M. 2505.60.

Silver coins are of 5, 2, 1 mark and 50 pfennig (½ mark). The silver mark weighs 5.555 grammes 900 fine.

Bank notes in denominations of 1,000, 100, 50, 20 and 5 marks, are issued by the Reichsbank. The Reichsbank is authorized to issue notes in any amount provided the issue is covered by metal (which includes gold and silver) treasury notes and the notes of other banks. It may issue notes also if ⅓ is covered by metal, and the balance secured by bills, but the total issue must not exceed 541,600,000 marks.

Notes of four other banks, one each in Baden, Bavaria, Saxony and Wuerttemberg, in denominations of 100 marks are also in circulation. There are also governmental treasury notes, the amount of which is said to have been increased enormously after August, 1914.

3. *Stamp duties.*—Checks are subject to a tax of 10 pfennige each, irrespective of amount, and bills of exchange must pay 50 pfennige for each 1,000 marks or fraction. The stamp tax can be avoided on checks by writing after the name of the drawee bank "Pay against this check from our credit balance."

For quotation purposes the stamp duty is reckoned at ½₀ of 1 per cent or .05 cent per 400 marks. Drafts

drawn in dollars are stamped on the basis of 4.25 marks per dollar.

In order to avoid German stamp duty, American exporters, instead of drawing sight drafts on their German customers, instruct the latter by formal letter to pay the amount of the purchases to the American bank's German correspondent.

These are called Letters of Delegation and are sold quite extensively. They are usually accompanied by bills of lading only, to be delivered on payment of the amount involved. Sometimes, however, the other shipping documents are attached as in the case of documentary drafts.

The Imperial Reichsbank of Germany transfers money from one branch to another free of charge for clients who carry satisfactory balances. These are known as *Giro conto* transfers. Outside of convenience to the customers the practice evades the stamp duty on checks.

As money can be transferred by the *Giro conto* system to any city in Germany where a branch of the Reichsbank is located, premium or discount on exchange between different German cities (as in the case between New York and Chicago or between Canada and the United States) is unknown.

4. *Interest rates and commercial usages.*—Interest is calculated on a basis of four marks to 95 cents, and 360 days to the year and 30 to the month. There are no days of grace.

Documentary *acceptance* bills are generally dis-

counted at the open market (private discount) rate and documentary *payment* bills at the Reichsbank discount rate.

Contrary to the practice of English banks, German banks will discount documentary *payment* bills and place the proceeds to the credit of the foreign bank's account.

Cash items and remittances are credited to the account "value" (by value is meant the date from which interest is credited or debited) the day *following* the date of actual payment, instead of "value" the date of payment as in London.

In the case of sight bills drawn with documents against acceptance, the first of exchange is generally forwarded direct to the point on which it is drawn for the purpose of fixing the date of maturity of the bill at the earliest possible moment. The second of exchange is forwarded direct to Berlin or other central town in which the foreign bank keeps its account, for discount and credit.

It is not customary to indorse the first of exchange, but indorsements by the bank may be made to the order of its correspondent in Berlin, to whom the duly indorsed seconds are remitted in due course.

Importers in Germany as a rule will not accept drafts against importations until the duplicate documents (duplicate draft, bill of lading, etc.) are presented, and in order to have the original draft accepted immediately upon its arrival, banks in this country when forwarding such bills for acceptance

and collection, will attach to the original draft a memorandum agreement to the effect that the duplicate bill of lading is in their possession and that the duplicate documents will be delivered in due course.

In the case of bills which are not payable in Hamburg or Berlin, a commission charge varying from ½₀ to ¹⁄₁₀ of 1 per cent is made for collection. This charge should of course be taken into consideration in calculating the value of a bill.

5. *German quotations.*—Berlin quotes on an eight-day basis,[1] marks per foreign unit or hundred unit:

London	20.45½	marks per	£1
Latin Union...	81.30	" per	100 francs
Austria	85.30	" per	100 crowns
Russia	216.	" per	100 roubles
Amsterdam ...	168.70	" per	100 florins
New York	4.22	" per	$1

6. *American quotations.*—Quotations at so many cents (about 23.87) to the mark are used only in minor exchange operations and for drafts drawn on small German towns. In the case of large transactions marks are generally quoted 95½ or 95⅝, etc. (advancing by ¹⁄₁₆th of a cent per 4 marks) which means that four marks are worth 95½ or 95⅝, etc., cents. When this method is used, it is necessary, when making calculations, to multiply or divide by four, in order to obtain the rate per dollar or per mark.

For all ordinary transactions this method of quota-

[1] To obtain the check rate add 8 days' interest; there are no days of grace in Germany.

tion is sufficient, but in wholesale transactions, where the quotations are necessarily close, the shading is effected by increasing or decreasing the quotations by $\frac{1}{64}$ of 1 per cent of the dollar amount.

Where the fractional rate of plus or minus is used, it applies only to the amount in dollars. Therefore in converting dollars into marks:

(a) A *plus* fraction means that *fewer* marks will be obtained, so deduct the fraction from the marks.

(b) A *minus* fraction means that *more* marks will be obtained, so add the fraction to the marks.

A study of the following table will make the use of these equivalents clear. It will be noticed that a minus sign before the fraction decreases the dollars, and increases the marks, and a plus sign before the fraction increases the dollars and decreases the marks.

Marks per dollar	Cents per 4 marks	Cents per mark
4.168620	$96 - \frac{3}{64}$	23.98875
4.167969	$96 - \frac{1}{32}$	23.99250
4.167317	$96 - \frac{1}{64}$	23.99625
4.166666	96	24.
4.166015	$96 + \frac{1}{64}$	24.00375
4.165365	$96 + \frac{1}{32}$	24.0075
4.164714	$96 + \frac{3}{64}$	24.01125

7. *Conversions.*—As Germany uses the decimal system, additions, subtractions, etc., are performed in the same manner as for dollars.

To convert marks into dollars.—Multiply the amount in marks by the rate in cents.

3,000 marks at .238 per mark $= 3000 \times .238 = \$714.$

To convert dollars into marks.—Divide the rate into the amount in dollars.

$714 at .238 = 714 ÷ .238 = 3,000 marks.

The same rules apply when the special quotation of cents per four marks is used; care, however, must be used to *divide* by four when converting marks into dollars and *multiply* by four when converting dollars into marks.

(a) Marks 1,466 at 95½ = $\frac{1466 \times .955}{4} = \frac{1400.03}{4} = \$350.$

(b) $350 at 95½ = 4 (350 ÷ .955) = 366.492 × 4 = Mks. 1465.968.

In converting marks into dollars when fractional rates are used, find the amount in dollars at the clean rate as in (a), then add or deduct the fraction, as the case may be, to or from the amount.

Marks 1,466 at 95½ = $350 (see example a).
Marks 1,466 at 95½ + 1/32 = $350 + .11 (1/32 of 1% of $350) = $350.11.
Marks 1,466 at 95½ — 1/32 = $350 — .11 = $349.89.

In converting dollars into marks you *reverse* the fractional signs plus or minus:

(c) $349.89 at 95½ less 1/32 = 349.89 *plus* 1/32 of itself = 349.89 + .11 = $350.
(d) $350.11 at 95½ plus 1/32 = 350.11 *minus* 1/32 of itself = 350.11 — .11 = $350.

We can then proceed as in example (b) and reduce $350 to marks = Marks 1,465.97.

8. *Profits.*—When the rate is quoted in cents per mark, a fluctuation of .01 cent amounts to about 42 cents per $1,000. ⅛ of 1 per cent profit would be represented by .03 cent advance.

$1,000 at 24	= 4166.67
1,000 at 24.03	= 4161.46
a gain of marks	5.21 or $1.25 on $1,000

When the quotation is cents per 4 marks an increase in the rate of ⅛ cent (96 to 96⅛) corresponds roughly to ⅛ of 1 per cent in the dollar amount.

$1,000 at 96	= 4166.67
1,000 at 96⅛	= 4161.25
a gain of	5.42 or $1.31 per $1,000

If it is desired to make an *exact* profit, take the percentage on the rate itself.

Rate	.96
Profit, ¼ of 1%	.0024
	.9624 per 4 marks or 24.06c. per mark
$1,000 at 96	4166.67
1,000 at 96.24	4156.28
1,000 at 96¼	4155.84

at 96.24 a profit of 10.39 marks or $2.50 is made, and at 96¼ a profit of 10.83 marks or $2.60, a difference of ten cents per $1,000 in favor of the seller. The latter method is close enough therefore for ordinary transactions.

A fractional variation of 1/64 of 1 per cent of course represents 15⅝ cents per $1,000.

9. *Purchase of German long bills.*—The demand rate is the basis from which the rates for bills are calculated.

The German official bank rate and the private discount rate govern the interest on the different classes of bills.

Quotations for time bills drawn on Germany are arrived at by deducting the interest, stamps, etc., from the demand rate.

GERMAN EXCHANGE INTEREST TABLE FOR USE IN PURCHASING BILLS OF EXCHANGE

Rate per cent	3 days' sight	10 days' sight	30 days' sight	60 days' sight	90 days' sight
Basis	$95.	$95.	$95.	$95.	$95.
1/16	.001	.002	.005	.010	.015
1/8	.001	.003	.010	.020	.030
1/4	.002	.007	.020	.040	.059
1/2	.004	.013	.040	.079	.119
3/4	.006	.020	.059	.119	.179
1%	.008	.026	.079	.158	.237
2%	.016	.053	.158	.317	.475
3%	.024	.079	.238	.475	.712
4%	.032	.106	.317	.633	.950
5%	.040	.132	.396	.792	1.187
6%	.047	.158	.475	.950	1.425
Stamps	.05	.05	.05	.05	.05

The above figures are calculated on the basis of marks 400 being equal to $95 and 360 days to the year.

What price can be paid for 60 days' sight drafts on Hamburg, Reichsbank rate 3 per cent, check rate 95.50?

New York check rate on Berlin 95½ = 95.50
Less stamp duty 1/20 of 1% ..... — .05

60 days at 3%	— .48	.53
		94.97 or 95 — 1/32 per 4 marks

If the New York rate is supplemented by a fractional quotation, the following decimals should be added or deducted, as the case may be, to the rate in calculating the value of the bills:

1/64 .015 1/32 .00030 3/64 .00045

Find the price of a thirty-day sight draft, interest 3%, check rate 95½ plus 3/64.

Cheque rate		95.50
plus 3/64 of 1%		.045
		95.545
less Stamps 1/20 of 1%	— .05	
30 days at 3%	— .24	.29
		95.255 or 95¼

In Canada the above calculations would be affected by the discount or premium on New York funds; in German exchange the premium is added or deducted as the case may be.

REVIEW

What has made the Berlin exchange market important?

Describe the German monetary system.

How do American exporters avoid German stamp duty?

How is interest calculated in Germany? What is the German commercial usage regarding drafts against importations and what practice should American banks follow in forwarding such bills for acceptance and collection?

How are German quotations made? What kind of quotations are used in minor exchange operations and what kind in large transactions?

What is the basis from which rates for bills are calculated? What governs the interest on the different classes of bills in Germany?

CHAPTER XVII

EXCHANGE WITH OTHER COUNTRIES

1. *Gold basis of exchange.*—The facility with which exchanges are effected is due to the fact that, with few exceptions, the monetary systems of the world are on a gold basis, or at least a gold exchange basis. Where the contrary is the case the exchange situation causes much difficulty locally and hampers the growth of international relations. Whatever may be the local circulation gold has come to be the international money; and relations of all nations with the great financial centers are based upon gold even tho they have not the gold standard.

It is natural therefore that the nations which early adopted the gold standard should have an ascendancy in foreign trade. We have already spoken of three principal centers, and it remains only to consider Amsterdam, which ranks among the chief exchange marts.

2. *Dutch exchange.*—The monetary unit of the Netherlands is the florin (guilder or gulden) 100 Dutch cents (40.2 cents) weighing .6048 grammes of fine gold.

Quotations on Holland are stated in cents per guilder or florin (the par value being 40.20 cents) advancing by .01 cent as in the other exchanges 40.20,

40.21, 40.22 cents, etc. The rate is also expressed 40 1/16, 40 1/8 cents, etc., and for large transactions the rates are supplemented by fractions as in German quotations.

The conversion is simple arithmetic. To convert dollars into florins, divide the dollars by the rate per florin. To convert florins into dollars, multiply the amount in florins by the rate per florin.

The bill stamp is 1/20 of 1 per cent or two cents per $40.

Interest on Dutch long bills is based on $40 per 100 guilders or florins.[1] There are no days of grace and interest is reckoned by taking the exact number of days and the year at 360 days.

When fractional rates are used they should be dealt with in a manner similar to the method used in German calculations, and added to or deducted from the dollar value when converting florins into dollars, but when dollars are converted into florins, the equivalent of the fraction converted into florins must be added if minus, and deducted if plus.

The differences made by: (1) a fractional advance; (2) one-hundredth of a cent advance; (3) 1/16 of a cent advance, are illustrated below:

Florins	Rate	Dollars
2.500390	40 — 1/64	.3999375
2.50	40	.40

[1] The interest is easily reckoned on a basis of $40 per 100 florins, or the constant 1/900 multiplied by the rate and time will give the interest on $40.

60 days at 4% = 1/900 × 60 × 4 = 4/15 or 26 2/3 cents.

Florins	Rate	Dollars
2.499609	40 — 1/64	.4000625
2.499375	40.01	.4001
2.496099	40 1/16	.400625

An advance of .01 cent in rate represents a profit of 25 cents per $1,000.

An advance of 1/16 cent (or .06¼ cent) represents a profit of $1.56 on $1,000.

When quoted rates are supplemented by fractional quotations it is necessary to take these fractions into consideration in calculating the rates to be paid for bills as follows:

1/64	.0062	Add for a plus percentage.
1/32	.0125	per $40
3/64	.0187	per $40
1/16	.0250	Deduct for a minus percentage.

Example.—Find the value of a 60 day bill on Amsterdam, discount rate 3%, demand rate 40 1/16 — 1/32

40 1/16		= 40.0625
less 1/32 of 1%		.0125
		40.0500
Less Interest 60 days at 3%	.20	
Stamps 1/20 of 1%	.02	.22
		39.8300 or 39.83 cents per fl.

3. *Exchange with other gold standard countries.*—Apart from variations in the money unit, the calculation of the mint par of exchange with other gold standard countries offers little difficulty. It is sufficient to refer here to the tables at the end of this volume, in which full information concerning the coins

of the nations of the world is given. The mint par between any two countries is always obtained by dividing the weight of fine gold in the unit of one country by the weight of the fine gold in the unit of the other.

Tho known by different names in various countries it will be noted that the coinage is in many cases identical. The chief monetary groups are those of the pound sterling, the franc, the dollar and the crown (Scandinavian). This renders the calculation of the mint par comparatively easy, and this calculation is further facilitated by the fact that apart from the British and Indian currencies the monetary denominations of all countries follow the decimal basis.

When two countries have identical systems exchange may be quoted on the percentage basis. Thus, London exchange on Australia is expressed as a percentage discount or premium as the case may be. It is of course to be understood that while the mint par of exchange can be readily calculated from a table which expresses the coins of different countries in terms of fine gold, such a table does not contain the information necessary to ascertain the gold shipping points. These depend not only upon the cost of transportation including insurance but also on the mint charges of the respective countries.

4. *Exchange quotations.*—The calculation of the mint par of exchange between certain countries has more of theoretical than of practical interest. There are few if any countries which have direct exchange

relations with each one of the others. Most of these countries have dealings with Great Britain and sterling exchange is therefore the most widely used international money of payment. Nearly every country is interested therefore in London exchange, and London, according to the measure of its dealings, is interested in exchange on such countries. The interest in other financial centers is less universal.

Consideration has been given in the preceding chapters to the principal countries with which New York has direct dealings. Before the war there were only a few other countries perhaps, Italy, Spain, Russia, Austria and the Scandinavian countries with which direct exchange relations were sufficiently numerous to admit them to the newspaper lists of exchange quotations. Of course this does not imply that the United States was without commercial relations with many countries besides those which have been mentioned. Adjustments with those countries were effected for the most part thru the medium of sterling exchange.

Since the outbreak of the European war New York has been less dependent upon London. Countries which heretofore sought new supplies of capital in Europe are looking to the United States. A considerable number of foreign loans have been floated in New York, and quotations of foreign bonds have become a regular feature of the stock exchange reports. As a consequence there have been established direct relations which did not exist before, and the exchange

quotations now include a number of countries which did not figure in them before 1914. How far these conditions are likely to be permanent is discussed in the next chapter.

5. *Gold exchange standard.*—An economical method of enjoying the international advantages of a gold standard without the burden of maintaining large gold reserves is offered by the gold exchange standard. The local currency may be either silver, paper, or both, but the government or bankers of these countries by the sale of exchange or other means, are able to settle all international transactions on a gold basis.

The government of a gold exchange standard country will take gold in exchange for local currency but does not undertake to give gold for internal use in exchange for local currency, tho it does provide gold in other countries; that is, it will sell bills on these countries or even ship gold if necessary. The bills are sold at a price a little below the normal "export point"; in other words, the buyer has to pay a little less than the actual cost of shipping gold itself providing he was able to obtain it. It is essential, however, that the local currency received for the bills must not be put back into general circulation. The reason for this precaution is apparent when it is pointed out that, in a gold standard country, when exchange becomes unfavorable, the corrective export of gold contracts the currency and thus tends to raise the rate of discount and lower prices, which checks the outflow of

gold. In a gold exchange standard country the sale of bills is equivalent to an outflow of gold and should, therefore, have the same effect of contracting the currency. This it will not do unless the paper or silver money so received is withheld by the Government from circulation until a demand for more currency is manifested by the public offering gold for it.

6. *Philippine Islands.*—The Philippines may be taken as a concrete example of the operation of a gold exchange standard. The currency consists of silver pesos issued by the United States Government at a guaranteed or fixed value of fifty cents gold, the seigniorage or profits from which are deposited in New York as a reserve. When exchange becomes unfavorable, drafts on New York are sold by the Philippine Treasury and the silver pesos received in payment are withdrawn from circulation until the exchange once more becomes favorable and gold is offered in exchange for currency.

7. *India.*—A somewhat similar system prevails in India. The currency consists of silver rupees issued by the Government out of the profits of which a "Gold Standard Reserve" has been accumulated in London and invested in gold and short date and cash loans. When the exchange value of the rupee falls below 16 pence gold, the parity is maintained by the sale of bills drawn on London. These bills are met from the funds of the "Gold Standard Reserve" and the rupees received in payment are kept out of circulation.

8. *Argentina.*—The Argentina currency is on the model of that of France, and the peso is equivalent to the five-franc gold piece. It weighs 1.451646 grammes of fine gold equivalent to $.96475 or 47.58 pence. Argentina introduced the gold standard in 1881 but maintained it for only five years when a paper currency took its place. Gold commanded a premium subject to enormous fluctuations. In 1899 the Government fixed the premium in gold at 127.2727 per cent; that is to say, it fixed the value of the dollar in paper at 44 cents gold or $100 paper equal $44 gold or $\frac{(100 \times 100)}{.44} = 227.27$ paper dollars equal $100 gold. The value of the currency or theoretical dollar in United States money is therefore $\$.96475 \times .44 = \$.42449$, and in English money $47.58\text{d} \times .44 = 20.935$ pence. The Government maintains this parity thru the medium of the "Caja de Conversion" which exchanges notes (curso legal) for gold coins and gold coins for notes on a basis of 44 gold centavos per paper dollar. The following foreign coins are legal tender at a fixed rate:

Sovereign, for gold	$5.04
20 franc piece, for gold	4.00
Eagles, for gold	10.364
20 mark piece, for gold	4.96
Peru, 5 soles, for gold	5.00
Spain, 25 pesetas, for gold	5.00

Bills of exchange on foreign countries are quoted both in gold and paper and rates fluctuate according to

the usual course of supply and demand, the rate for a 90-day bill on London varying from 47¼ to 49¾ pence per gold peso. To convert a gold quotation to a paper basis, multiply the gold rate by 44 centavos; for example, 48½d × .44 = 21.34 pence or vice versa; to convert a paper rate to gold divide by .44, $\frac{21.34}{.44} = 48\frac{1}{2}$ pence. The value of a sovereign is $5.045 gold, therefore $\frac{5.045}{.44} = \$11.459$ paper pesos. Quotations in New York vary from 41½ cents to 43½ cents per paper peso (94.32 cents to 98.86 cents per gold peso).

9. *Brazil.*—The unit is the milreis divided into 1,000 reis. The milreis weighs .82207 gr. of fine gold equivalent to $.54634.

The circulating medium is composed of convertible and inconvertible Government notes, both classes of notes having legal tender qualities and the same purchasing power in the country. In 1906 the Brazilian Government established the "Caixa do Conversao" on the model of the Argentina "Caja de Conversion" and fixed the value of the paper currency at 15 pence per milreis or 16 milreis to the pound sterling and issued on that basis 320,000,000 milreis. In January, 1911, the Government increased the amount of convertible notes and increased the value of the paper milreis to 16 pence or 15 milreis to the pound sterling. This overvaluation was unwise as it precipitated a financial crisis from which Brazil is still suffering. At 15 pence per paper milreis, gold was at a premium of 79.63 per cent, or 1 milreis in gold equalled 1.7963

paper milreis. In fixing the value of the milreis at 16 pence instead of 15 pence the Government lowered the premium on gold to 68.40 per cent, or 1 milreis gold = 1.684 paper milreis. As a sovereign contains 7.32238 gr. of fine gold the present theoretical unit, like that of India, weighs 1/15 of 7.32238 or .48816 gr. of fine gold; equivalent to 32.444 cents (or as there are .82207 gr. of fine gold in the gold milreis $\frac{100}{168.40} \times .82207 = .48816$ gr.).

Brazil quotes as follows:

London .... 90 days sight in pence per milreis,
Paris ..... 90 days sight milreis per franc,
Hamburg .. 90 days sight milreis per mark,
New York at sight .... 90 days sight milreis per dollar.

Owing to the depreciation of the paper milreis, the war and other causes, the quotations on London have recently ruled low; about 12 or 13 pence per milreis as against the theoretical normal of 16 pence. When the paper currency of a country depreciates, the exchanges fall in sympathy because, as foreign exchanges are on a gold basis, the premium on gold naturally extends to them. Depreciation, therefore, stimulates exports and benefits those who have to receive money from foreign countries, but checks imports and adversely affects those who have to pay money to foreign countries. For instance, in the case of Brazil, when exchange is at 15 pence per milreis, an exporter would receive 16,000 milreis for a £1,000 draft on London,

but with exchange fallen to 12 pence, he would receive 20,000 milreis for the £1,000—a profit of 4,000 milreis, probably clear, as it is unlikely that his rent and other expenses in Brazil have increased. He has made a large profit out of the turn of exchange. On the other hand, an importer buys £1,000 worth of goods in England; he will have to pay, when exchange is at 15 pence, 16,000 milreis; but when exchange drops to 12 pence per milreis, he will have to pay 4,000 milreis more for his £1,000. Consequently, the importer has to be constantly raising his prices to meet the fall in exchange, and the public in turn have to meet these increases and pay greatly enhanced prices for the necessaries of life, altho their wages, salaries, etc., remain exactly the same. A ninety-day sight bill on London has an average currency of 110 days (17 days' voyage + 90 days + 3 day's grace).

10. *Silver standard.*—The silver standard exists in countries where it is enacted by law that silver alone shall be legal tender and the measure of value. China and its dependencies and some countries in South America are the exponents of this standard. The domestic trade of these countries is regulated by the bullion price of silver, but all outside transactions are based on gold, and in the end the value of silver is thus regulated by these international transactions. The number of silver using countries is rapidly decreasing. With the exception of Japan and India, practically all Eastern nations use silver either in the form of coins or bars, and the rates of exchange rise and fall with the price of silver. Owing to the vio-

lent variations in these rates, business is a highly specialized one and quotations and drawing facilities on the Orient are usually provided by one of the Anglo-Asiatic banks.

11. *China.*—As an illustration of a country with a silver standard, we may consider China. The ancient unit, the tael, continues to be used. A tael is actually a weight and not a coin and circulates in the form of shoe shaped slugs or small bars, and each province has a slightly different equivalent. The variation in weight in the sixteen principal kinds of tael [1] is from 37.5317 gr. of fine silver in the Hai Kwan tael to 34.0732 gr. fine in the Swatow tael. The Hai Kwan (or customs) tael is the most important. It is generally rated at 72 per 100 Mexican dollars. The official tael agreed upon by treaty is the K'up'ing tael divided into 100 cents of ten mills each. This unit weighs 37.513 gr. .980 fine and contains 36.56674 gr. of fine silver. The Chinese monetary system has been still further complicated by the series of revolutions the country has been passing thru. China also has recently issued a dollar or yuan weighing 26.8567 gr. .900 fine and is considering the adoption of the gold standard.

The values of the various taels vary with the price of silver and it is impossible to give a fixed equivalent, but it is easily ascertained by multiplying the amount of fine silver in the tael by the price of an ounce of fine silver. The Shanghai tael weighs about 1⅟₁₆ oz. of

[1] Morse in his "Trade and Administration in China" mentions seventy-two varieties of tael. Many of these taels are current only in remote and almost inaccessible localities.

standard silver (.925 fine) and is worth about 65 or 70 cents. The K'up'ing tael, for instance, weighs 1.-175625 oz. of fine silver; this at 55 cents per oz. = $1.175625 \times 55 = 64.6593$ cents. The Mexican dollar also circulates freely. Many of the silver coins are cut into pieces, which, in order to insure their currency are "chopped" or stamped as to their correct weight, etc., by some well-known merchant or banker.

12. *Paper currencies.*—Paper money issued by a government, when adequately supported by gold reserves, is a most useful factor in the finances of a country. When not so supported it is likely to prove a curse in the long run, as all the countries that have tried it, have found. Paper money which cannot be converted into cash at its face value, but which nevertheless must be accepted as representing the value printed upon it, is called inconvertible paper money. Paper currency of this kind is practically a non-interest bearing loan forced upon the public. The natural consequence is that the more of it that is issued, the less probability there is of its ultimate redemption, and the more it depreciates in value. Depreciation means that its purchasing power as compared with that of gold has fallen, or differently expressed, that prices as expressed in paper money have risen. If it requires, for instance, 225 paper dollars to purchase 100 gold dollars, gold is at a premuim of 125 per cent and paper money is at 44⅘ per cent of gold or at a discount of 55⅝ per cent; or again, 300 per cent premium, means that for 100 gold dollars

you would have to give 400 (300 plus 100) paper dollars.

In this connection the following problems will be found interesting:

(1) The premium on gold is 300%; at what % discount is paper money?

Answer: $\frac{300 \times 100}{300 \text{ plus } 100} = \frac{30{,}000}{400} = 75\%$ discount

(2) Paper currency is at a discount of 75% as compared with gold; what is the premium on gold?

Answer: $\frac{75 \times 100}{100 - 75} = \frac{7{,}500}{25} = 300\%$ premium.

The modern exponents of paper money currency have been chiefly the South and Central American republics, the majority of which, tho they are theoretically on a gold basis, are embarrassed by large quantities of inconvertible paper money. There has been a strong effort of late years on the part of the more progressive governments to put their currency and finances on a sounder basis. Among these may be mentioned Venezuela, Uruguay, Peru, Ecuador, Costa Rica, Salvador, Honduras, Haiti and Bolivia. The following countries are still on an inconvertible paper basis with a more or less fixed premium on gold:

	Premium on gold	Value $100 gold
Honduras ..	140.00%	240. paper
Guatemala ..	1,500.00%	1,600. paper
Chili	84.6 %	184.60 paper
Colombia ...	9,900.00%	10,000. paper
Paraguay ..	1,400.00%	1,500. paper

Inconvertible paper money has no intrinsic value and its gold value depends entirely upon what the people of the country are willing to accept it for in exchange for gold, and therefore the rate of exchange between a country on an inconvertible paper basis and one on a metallic basis can only be arrived at by ascertaining at the moment the amount of gold that the public of the former country is willing to give for its paper unit.

13. *Chile.*—Of the paper standard countries Chile is commercially the most important.

The monetary system of Chile is theoretically on a gold basis, but the gold standard was abandoned and was replaced by a paper currency. The theoretical unit is the peso divided into 100 centavos. It should be the equivalent of 18 pence or $\frac{3}{40}$ of £1 and weigh .599103 gr. 916⅔ fine or .54917 gr. fine gold. The present circulation medium consists of government notes worth about 9¾d.—equivalent to a premium on gold of 84.61 per cent. Chile has recently authorized its Conversion Office to issue notes against gold at a fixed rate of 12 pence per peso, which if carried out will place it on a gold exchange basis.

Export duties are payable in gold at the rate of 18 pence per peso or in drafts on London. The sovereign is legal tender for 13⅓ pesos ($13\frac{1}{3} \times 18 = 240$d.).

Chile quotes ninety-day sight bills on London at rates fluctuating between 9¾d. and 11d. per paper

pesos. The currency of one of these bills averages 120 days (27 days voyage + 90 day + 3 days grace).

REVIEW

What is the best basis of exchange and why?

What is the monetary unit of the Netherlands? How are quotations on Holland stated? How are conversions made?

How is the mint par of exchange between countries obtained? When two countries have an identical system of exchange, how is it quoted?

What is the position of New York with reference to exchange since the outbreak of the war?

What advantages does the gold exchange standard offer to a country? Give an example.

How is exchange regulated in countries with a silver standard? What effect has this standard on business in those countries?

Discuss the advantages and the disadvantages of paper currency.

CHAPTER XVIII

LONDON AND NEW YORK AS FINANCIAL CENTERS[1]

1. *New York as a financial center.*—Since the beginning of the present European war there has been a great deal of discussion in the financial papers and elsewhere as to the effect of the war on London's position as the financial center of the world and the probability of New York succeeding in assuming and keeping the position. It is, of course, natural that the serious interruption in shipping, commerce and exchange thruout the world would minimize, for the time being, London's supremacy, especially when the stupendous task of financing not only Great Britain's munition requirements but those of her allies has devolved upon her to so large an extent.

There is no question that at the end of the war, New York's position as an exchange and financial center will be vastly enhanced, but not necessarily at the expense of London. Sovereigns and dollars are the only two important mediums of exchange that have been at all reliable since the war commenced, and this will no doubt put both of these exchanges immeasurably ahead of the exchange of any other country at the end of the war.

[1] This chapter was originally published as an article in the *Annals of the American Academy of Political and Social Science*, Nov., 1916, and is reproduced in this volume with permission of the publishers.

2. *The reasons for London's supremacy.*—London has been for centuries the commercial clearing house of the world. This is due not only to its central situation, its immense foreign trade and its large mercantile navy, but also because, thru its highly perfected banking system, it provides facilities of such magnitude and of such entire efficiency for the final settlement of exchange operations, that drawers or negotiators of bills in every quarter of the globe gave preference to sterling over any other form of exchange. It has been estimated that nearly ninety per cent of all letters of credit issued thruout the world were, prior to the war, drawn in English money. Lloyd George, in commenting on the unique and commanding position of Great Britain in international trade and the consequent serious responsibility placed upon her at the outbreak of the war, said in November, 1914:

> We had not merely our own business to run; we were an essential part of the machinery that ran the whole international trade of the world. We provided the capital to raise the produce; we carried half the produce, not merely of our own country, but of the whole world. More, we provided also the capital that moved that produce from one part of the world to another, not merely for ourselves, but for other countries.
>
> I ask anyone to pick up just one little bit of paper, one bill of exchange, to find out what we are doing. Take the cotton trade of the world. The cotton is moved first of all from the plantations, say, to the Mississippi, then it is moved down to New Orleans; then it is moved from there either to Germany or Great Britain or elsewhere. Every

movement there is represented by a paper signed either here in London or Manchester or Liverpool; one signature practically is responsible for the whole of those transactions. Not merely that, but when the United States of America bought silk or tea in China the payment was made thru London. By means of these documents accepted in London, New York paid for the tea that was bought from China. We were transacting far more than the whole of our own business; we were transacting half the business of the world as well by means of these paper transactions. What is also important to establish is this: that the paper which was issued from London has become part of the currency of commerce thruout the world.

In considering the possibility of New York being a successful rival for supremacy as the exchange and financial center of the world, we can do no better than review some of the principal reasons why London has hitherto held that position and, it will be realized, that New York must duplicate these conditions in great part if not in entirety before London can be dethroned. These reasons and conditions can be tabulated briefly under three headings; physical, psychological and economic. Those coming under the first heading are of course unalterable; those under the second heading can be remedied in time thru education and training; and those under the third heading are matters of legislation and custom.

3. *Physical conditions favorable to London.*— London is situated on the threshold of Europe in the heart of the world's commercial activities, directly opposite the estuary of the Scheldt and nearly opposite that of the Rhine, and is within a short distance

of every important exchange center in the world with the exception of New York. This may be considered as an almost insuperable obstacle to New York's ambition.

London has the advantage of water lanes free from ice and fog to every large port in the world with the exception of New York; the climate is equable and liquids and perishable goods run little or no danger of freezing in winter.

The restricted insular area of Great Britain, a little larger than the State of Minnesota, is also an important factor, as it not only affords an immense seaboard compared with its size, but concentrates the population. A frequent and rapid transit service makes Great Britain practically one large city with London as the business center. Every bank in the country has a branch or correspondent in London, carries its reserves there and clears direct with every part of the country thru its London agent. The economy of resources effected by this natural concentration of funds is seldom realized and is worthy of study. The insular position of London renders it comparatively free from the danger of invasion and seizure by a hostile power and this immunity has been a factor in making London a world depository.

4. *Mail and cable facilities.*—The geographical situation of Great Britain, coupled with her willingness to invest money in international utilities, has placed her in a unique position as regards mail and cable facilities. Thru her immense mercantile navy, London

has direct communication by fast steamers with every important port in the world and consequently acts as a foreign mail clearing house for all other countries. If French, German or Dutch steamers afford a faster service to any point they can be utilized with little or no loss of time.

As Great Britain owns and operates two-thirds of the submarine cable mileage of the world, it is natural that London should be a great cable center with practically direct communication the world over. This service is now supplemented by a far flung system of wireless stations. Furthermore, under normal conditions, every main railroad on the continent of Europe gives its best service and equipment to its London mail train. The Trans-Siberian Railway already gives access by rail to the Pacific and it is only a question of time before thru connections with India, China and South Africa will be established.

5. *Time advantages.*—In dealing in foreign exchange and stocks London is the center of the world as regards time. She knows the conditions in eastern markets before they close and is open long enough to operate in New York before her own markets close. Her position is therefore pivotal as regards time and distance. Time is the essence of an exchange transaction; a day's delay may turn a profit into a loss and, granting that New York has the means and enterprise to create an efficient steamship and cable service in due course, how can she eliminate the more serious

handicap of distance by water from all other financial centers?

6. *National characteristics.*—Great Britain is a land of slowly acquired fortunes and the banker and merchant there are content with small profits and slow returns. They have long realized the fact that trade follows the loan and have, therefore, been willing to invest money in foreign countries with no prospect of recovering immediate returns or large profits. The financing of these loans abroad has been an important factor in making the London money market so supreme. It is doubtful if the American is adapted temperamentally for operations of this kind or for the small profits of the exchange operations connected therewith. The United States has still a vast area in proportion to its population, its natural resources are not yet fully developed and it is a country of large and rapidly acquired fortunes. It will, therefore, be many years before the investors and entrepreneurs are forced to direct their attention to foreign fields. Great Britain, before the war, invested over a billion dollars annually in foreign enterprises and at the beginning of the war had between twenty and thirty billions so invested. The United States at that time was a debtor nation for over six billion dollars, and allowing that some two billions of this amount were paid off or absorbed in the past two years of the war, she had to invest nearly twenty-five billions before she could be on an equal footing with Great Britain in this connection.

7. *Willingness to seek fortune abroad.*—The average family of Great Britain is large compared with that of the United States and there is little room and few opportunities at home for the younger sons. This class of men finds its way into the army, the navy and the mercantile marine and go abroad as clerks, etc., to foreign and colonial banks and commercial houses. The more venturesome, as soon as they acquire experience, carry British trade and prestige to new and undeveloped countries—British subjects are found everywhere, no matter how remote the place.

The young American, on the other hand, has so many opportunities at home that there is little inducement to venture abroad except for pleasure. He is probably the only son of the family and takes up his father's business or is assisted in setting up in business for himself. If he goes abroad, he is not content with a subordinate position, but wants to be his own master and strike out for himself. Preferably he goes back to his home to do this. We might instance the experience of the International Banking Corporation, a state bank, chartered in Connecticut with foreign branches chiefly in the Orient. This bank, tho an American institution, is manned principally by Englishmen. It will be interesting to watch the personnel of the staff of foreign branches of national banks established under the Federal Reserve Act.

8. *London without rivals at home.*—To be a world center of finance it is essential that a city must, in the

first place, be the unquestioned financial center of its own country. London is indisputably recognized as the financial center not only of Great Britain but of the British Empire. No local jealousy is evinced by Birmingham, Liverpool, Glasgow or other large cities as to London's supremacy in this regard. New York is the principal financial center of the United States, but it is not the only financial center. Chicago, St. Louis, San Francisco and other important centers are strong competitors with New York for domestic, and to a certain extent for foreign, business. Aside from sectional jealousy, the vast area of the United States makes this competition inevitable. Will these cities abandon selfish motives and aid New York in her ambition? Will not the expansion of the country's foreign trade accentuate rather than diminish this competition? Chicago and Minneapolis will share in the development of the great Canadian West; San Francisco will become more important with the extension of business with the Orient, and New Orleans will benefit by the opening of the Panama Canal and the expansion of trade with South America. The United States is not a country but a collection of countries or commonwealths of which New York State is only one. The tendency is to minimize New York's financial supremacy rather than to assist it. A study of the discussions on this feature, preceding the passing of the present Federal Reserve Act, will bear out this statement.

London's supremacy is the cumulative result of numerous forces, political as well as economic, spread over a long series of years during which time the world has learned to think in terms of British money and the bills of exchange on London have been raised almost to the dignity of an international currency, while the safety of the Bank of England and the value attached to the word "sterling" have become proverbial. Sovereigns, and to a great extent Bank of England notes, are current the world over without recourse to money changers. The dollar and the dollar bill must be made equally well-known and acceptable.

9. *Influence of custom and tradition.*—It must not be overlooked that, when an international business is so long established and well centralized as the money market of London, the world will continue to use it as a matter of convenience irrespective of the possibly superior facilities of New York. The financial roads to London are well defined by much travel, and business tradition will favor the old stand, for such is human nature.

One of the main foundations upon which London's position rests is the world's estimation of its credit. This credit is tried and sound, backed by great resources, and has been reared upon the trust and confidence in the honorable tradition of British business ethics. It is unlikely that the world will have cause to revise its opinion after the war is over.

10. *Economic factors in London's position.*—The

principal economic factors which tend to enhance London's position as a financial center may be considered under the following heads:

Free Gold Market
Liquid Discount Market
Stability of Money Rates
Immense Mercantile Navy
Great Foreign Export and Import Trade
Tariff
Excellent Banking Systems at Home and Abroad
The Numerous Branches of Foreign and Colonial Banks Established in London
Freedom from Panics and Financial Disturbance
Free Navigation Laws
Marine Insurance, etc., and reliable Ship Registration

11. *Free gold market.*—Of the four great exchange centers of the world, London, New York, Paris and Berlin, London is the only one that can always be depended upon to meet every legitimate trade demand for gold, which means that there is no delay or premium entailed in realizing gold on a bill expressed in English money. It is payable in pounds sterling which represent a definite and immutable weight of fine gold. Great Britain adopted the gold standard unequivocally in 1816, over one hundred years ago, and has not departed from it since, even to the extent of charging a fractional premium on gold or by restricting its export by legal or sentimental embargoes. Even war conditions did not deprive the Englishman of the privilege of converting Bank of England notes into gold.

The Bank of France always reserves the right to pay in either gold or silver in order that in times of stress it could charge a premium on gold. The Imperial Bank of Germany, tho theoretically obliged to pay gold, makes it very uncomfortable for any bank or customer who has the temerity to demand gold for export purposes. Both France and Germany, since the war, have abandoned any attempt to maintain a gold basis.

New York, tho generally willing to part with gold for export purposes, was—at least up to the establishment of the Federal Reserve system—handicapped by the lack of machinery for the efficient and economical mobilization and control of the gold reserves of the country.

England is not only committed to an undeviating policy to maintain a free gold market but enjoys peculiar advantages in this connection. Great Britain is not only the largest creditor nation of the world but also controls and supplies, within the British Empire, nearly two-thirds of the raw gold output of the world and has the control automatically, independent of any exchange movements, of over $350,000,000 worth of newly mined gold each year. Owing to this gold income Great Britain has been able to maintain her position as a free gold market during the whole period of the war and its bank and treasury notes have been, and still are, redeemable in gold at the Bank of England on presentation.

It is true, that since the war, London's activities as

an international gold market have been curtailed owing to the disturbances in trade routes and the difficulties and risks of ocean transportation, but, so important is the certainty of the English monetary standard and financial policy to the merchants and brokers of the world, that it is unlikely that the war will cause more than a temporary recourse to other methods of settling international obligations.

12. *Liquid discount market.*—The natural complement of a free gold market is a liquid money market capable of absorbing bills of exchange to an almost unlimited amount. This unique feature of the London market makes a first-class bill of exchange on London as acceptable as gold. The strength and broadness of the London market, apart from the natural resources of the country, lie in the ebb and flow of foreign capital thru the machinery of the branches of foreign and colonial banks established there.

Altho London does not particularly encourage the establishment of foreign banks, it, on the other hand, does nothing to restrict the movement and allows freedom in banking privileges to all comers of good standing. This broadminded policy, tho it perhaps affects to a certain extent the individual interests of some of the British banks, is recognized as of great importance to London and the country in general, and therefore indirectly to the banks themselves. These branches of foreign banks, with their network of correspondents thruout the world, in addition to their direct influence on the exchange situation, give invaluable as-

sistance to the Bank of England in preserving the equilibrium of the money market.

The policy of New York in connection with foreign banks is just the reverse of that of London and is apparently based on a local and narrow point of view. New York bankers have always discouraged the establishment of foreign banks in their midst and have evoked state legislation and other means to this end. A few foreign banks are represented by agents, not by branches. They cannot take deposits or discount commercial paper and their activities are practically restricted to making call loans and dealing in foreign exchange.

The London discount rates are controlled by a central institution, the Bank of England, and changes in the rate are not only infrequent but seldom rise above six per cent. By this control of the money market thru the bank rate, as it is called, the Bank of England has been able to attract gold to London by raising the rate whenever the exigencies of commerce and the exchange situation require it.

Reference has already been made to the ability and willingness of Great Britain to invest its large surplus income in foreign and colonial securities and thus provide foreign countries with the means of paying for British merchandise and machinery. The movement of such investments forms a large part of the so-called invisible exports and imports and is necessarily an important factor in creating exchange and adjusting international balances.

13. *Mercantile navy and tariff.*—The absence of a tariff in Great Britain, except on a few specific articles, is of great importance, because not only do foreign goods find a ready market, but it permits British merchants and others to import goods into Great Britain free of duty and export them at their convenience. London and the other important seaports of Great Britain correspond to the freight yards at railway centers. Cargoes consisting of goods of every description pour into these ports from all parts of the world and are there sorted into mixed cargoes to be dispatched to various countries. In other words, London also acts as a clearing house for cargoes.

The United States is so irrevocably committed to a high tariff that it is unlikely that any appreciable modification will be possible for some time to come, tho this obstacle in New York's path might be removed in great measure by the establishment of free ports.

Large amounts of British capital have been invested in the establishment of banks in British colonies and in foreign countries with head offices in London, and these render invaluable assistance in the operation and preservation of British foreign trade and commerce.

Great Britain possesses a mercantile navy second to none in the world. This not only means an immense toll on the world's commerce in the way of freight, etc., but also enables Great Britain to govern to a great extent the destination of cargoes. Incidentally, because of her large shipowning, Great Britain is naturally

interested in marine insurance, and owing to the excellent standing of her insurance companies does an immense business in foreign marine insurance. Lloyd's, an association of English underwriters of marine insurance, collects and distributes by cable reliable maritime intelligence thru its agencies established in every part of the globe; it also issues Lloyd's Register, giving the rating, etc., of every British and foreign ship.

British navigation and shipping laws are liberal. A foreign ship is in the same position as a British ship with regard to British trade, and foreign ships engaged in the coasting trade are not subjected to higher port rates than British ships (141 Custom Law Consolidation Act 1876). British law affords equitable protection both to British and foreign seamen, but avoids emasculating the service by undue paternalism.

The navigation laws of the United States have always been a serious handicap to her shipping business and the Seamen's Law will still further embarrass the American ship owner.

14. *England's foreign trade.*—Under normal conditions Great Britain has an immense export and import trade with every part of the world. This great commerce is not only of material benefit to the country generally but the constant flow of inward and outward remittances forms an invaluable nucleus for London's foreign exchange operations, and bills of exchange can be bought and sold in London drawn on

any place in the world, no matter how remote. For the year ending December 31, 1913, the imports of Great Britain were £768,734,739 against exports of £634,820,326 representing shipments from and to every country of the world. At the end of 1915, excluding certain goods belonging to the British and allied governments, the figures for which are not available, the exports were £483,444,459 against imports of £853,756,279 a shrinkage of about 23 per cent. It is evident that Great Britain is still able to maintain the bulk of her export trade notwithstanding war conditions and the shortage of bottoms.

Great Britain has a fully developed banking system, eminently adapted to the requirements of her international trade and finance, which has been ably and successfully conducted thru a long series of years by highly trained bankers, in whose judgment and conservatism the British public have every confidence. Consequently the country is practically immune from panics and other financial disturbances. The banking laws are simple and impose no unwise restrictions as to legal reserves, etc., leaving such questions to the individual judgment of the banks themselves. Experience has shown that good banking is obtained not so much by good laws as by good bankers.

We have now reviewed briefly the principal reasons to which London owes her financial supremacy, and tho the events of the past few years have brought New York into a position of financial eminence and power, it remains to be seen how much of this power has been

thrust upon her temporarily and how much she has acquired permanently, at the expense of London.

15. *New York's present dominance temporary.*— Since the war commenced the United States has gradually changed from a debtor to a creditor nation, principally owing to the fact that vast exports of munitions, etc., have been made to belligerent countries, thus creating an abnormal trade balance in her favor. With this shifting of international balances, large amounts of gold have been received from debtor nations, a considerable volume of American securities held abroad have been absorbed by the New York market and large loans made to the belligerent nations, as well as to Canada and other countries of the American continents.

Owing to the position the United States then had as a wealthy neutral nation, far removed from the scene of conflict, a wide demand also developed for dollar exchange and dollar credits, not only in the United States but in foreign countries. In other words, the abnormal conditions induced by the war called upon New York to take the position of international bankers heretofore played almost exclusively by London. This rôle was assumed by New York, not so much by her own volition as by force of circumstances. Will these war time opportunities, when peace is declared, be sufficient to retain for New York the position which London with all her advantages took centuries to acquire? Before New York can do this to any great extent the United States must learn to think interna-

tionally and not provincially. It must increase its foreign trade tremendously and revise its navigation and alien labor laws and its tariff, all with a due regard to the comity of nations; sound permanent banking and currency system, removed from legislative tinkering must also be established, and finally foreign banks should be encouraged to establish branches in New York and other centers without unnecessary restrictions as to the business they may undertake.

On good authority the opinion is often given that the financial center of the world will always remain in Europe, if only for geographical and national reasons, but there is need and room for another strong financial center in addition to London and it would always be desirable that such an alternative should not be located in Europe, as the recent European crisis has amply demonstrated.

16. *New York's future.*—New York is already the financial center of the new world; she should strengthen and broaden her claim to this position and, as a coadjutor, relieve and assist London in her great responsibility as the world center. In the reconstruction that must follow the close of the war, Great Britain and the United States will undoubtedly play a great part and London and New York will find it more and more necessary to cooperate in the performance of their several functions.

New York will doubtless benefit permanently from the advantages and experience gained during the war. Great Britain will profit also from the intimate inter-

course with France, Italy and Russia, likely to result from the war which will undoubtedly tend to reestablish, if not strengthen, London in her former position. Great Britain has financed her allies generously thru the war and will not only have these large amounts refunded to her in due course but will receive collateral advantages which should more than offset the business lost to New York.

REVIEW

What has made London the commercial clearing house of the world?

Discuss some of the conditions favorable to London's position as a financial center?

What are the principal economic factors which help to enhance London's position as a financial center?

What changes must the United States make in order that New York may hold the financial position gained as a result of the European war?

CHAPTER XIX

WAR AND THE EXCHANGES

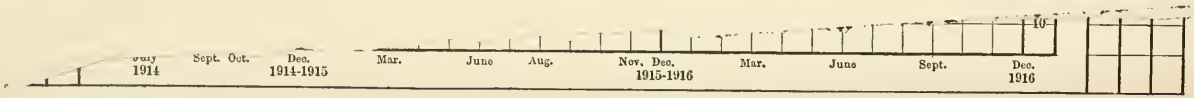
1. *War and its effect on international exchange.*— Exchange operations in the preceding pages have been considered almost entirely from the viewpoint of normal conditions, as it is safe to assume that, with the return of peace, international exchange will resume its ordinary channels. A brief review, however, of the manner in which the war has affected the exchanges may be interesting as well as instructive.

A prominent New York banker, Mr. Albert Strauss, once referred to foreign exchange as "an economic mechanism automatically making delicate international adjustments." The full significance of this terse definition has never been more fully realized than in those fateful days of early August, 1914, when the mailed fist of war fell and completely paralyzed the credit machinery of the world. The very perfection of the international credit machinery with its vast network of telegraphic nerves radiating from London, New York, Paris, Berlin and other financial ganglia was a factor in its own undoing. Cable communication was practically cut off by the destruction of some of the cables and by the establishment of censorships, and the little news that did succeed in filter-

ing thru was almost unbelievable, so terrific was its significance.

Events followed each other in rapid succession. Austria declared war on Servia, July 28, and Russia, Germany and France began to mobilize. On July 30, the Bank of England rate was raised to four per cent, and on July 31, to eight per cent. On the same day, unable to withstand the flood of continental liquidation, the London Stock Exchange closed, and a like course was soon followed by the New York Stock Exchange and by every bourse in the world. On August 1, Germany declared war on Russia and the Bank of England rate was raised to ten per cent. On August 3, Germany declared war on France. This was followed by a run on the Bank of England, and on August 5, England declared war on Germany. Europe was panic-stricken, specie payments were suspended and moratoria were being declared everywhere. For a time all was confusion until the energetic and courageous action of the British government, assisted by the remedial measures resorted to at other exchange centers, brought some order out of chaos and, to a certain degree, restored confidence.

During the first week of August the world's financiers faced conditions that were absolutely unprecedented and to which the generally accepted remedies or economic theories were inapplicable. Friends of peace, who scoffed at the possibility of a great European war and the necessity of preparedness, received


July
1914
Sept. Oct.
Dec.
1914-1915
Mar.
June
Aug.
Nov. Dec.
1915-1916
Mar.
June
Sept.
Dec.
1916
10

STERLING AND INTERNAT'L EXCHANGE QUOTATIONS IN NEW YORK FROM BEGINNING OF THE WAR TO 31st DEC. 1916 AND NEW YORK FUNDS IN CANADA.

a rude awakening, as the very international, financial and commercial interests on which they relied so fully to avert this war were the very first to fall victims to its destructive influence. The first week of August, 1914, found the world's business completely paralyzed and it will be interesting to study the various expedients used in the endeavor to repair and support the machinery of credit.

The whole subject of foreign exchange since the beginning of the war is most complex and, in this brief review, we have referred only to the more outstanding and evident effects, without attempting to explain all the causes. To do so would require an exhaustive study of the internal conditions of each country; largely a matter of conjecture at the present time. It is hoped, however, that sufficient has been said to make the accompanying chart intelligible and assist the reader in realizing the existence of the many mysterious and undisclosed influences proceeding from the economic pressure exerted by the war upon the financial centers of the world.

2. *Moratoria.*—Moratorium is a Latin word signifying delay. It is an extension of time for the payment of debts allowed, under exceptional circumstances, by the government of a country; in other words, it is an extension of the days of grace. During the Franco-German war of 1870, a French moratory law was passed extending the maturity of bills for three months.

At the beginning of the war, the majority of the

countries of the world found themselves with a large amount of floating and maturing indebtedness to provide for in London, and without any machinery for accomplishing it, except at an almost prohibitive loss. So dependent had the world become on the facilities offered by London and other large European centers for the adjustment of their trade balances between one another, that the complete breakdown in the exchanges left them with no channels whereby they could offset these balances except by direct settlement, either by gold shipments or the purchase of exchange in a debtor country for remittance to a creditor nation, both costly methods. Conditions were further complicated by the uncertainty of communication and the almost complete cessation of merchant shipping thruout the world owing to internment or commandeering. For these and other reasons, one country after another declared a moratorium of a more or less general nature. Among these may be mentioned:

Country	Date
Argentina	August 12
Belgium	" 6
Brazil	" 16
Bulgaria	" 7
Denmark	" 21
Ecuador	" 7
Egypt	" 9
Greece	July 26 —August 4
Italy	August 4
Norway	" 5
Paraguay	" 14
Portugal	" 24

Russia	July 20 —August 2
South Africa	September 15
Sweden	August 7
Switzerland	" 17
Turkey	" 3
Uruguay	" 15

Great Britain declared a moratorium for bills of exchange on August 2, 1914, in order to protect the credit of the accepting houses until they were able to secure remittances from abroad from the primary obligants. As this limited moratorium was found to affect adversely the position of domestic bills, the moratorium was made general on August 7 and this action, by affording temporary protection to the community at large, allayed any feeling of panic and possibly prevented runs on the banks. The moratorium was only temporary and was removed before the end of the year. It should be noted that, at no time since the beginning of the war, has the Bank of England ceased to redeem its notes in gold.

Germany declared no moratorium in name, but coolly stopped payment, as far as her foreign debts were concerned, and paid her domestic debts with copious additions to her paper money. Immediately on the declaration of hostilities Germany suspended the gold redemption of the Reichsbank's notes and, a few months later, made it a penal offense to buy or sell gold at a premium. These exactions are far more restrictive than a temporary moratorium on private bills, and reflect more seriously on the financial condition of a country.

3. *London and New York.*—Under normal conditions certain of the exchanges tend to fluctuate in groups, but since the war economic conditions have been so altered that these groups have broken up and rearranged themselves into three entirely new groups, namely, Great Britain and her allies, Germany and her allies, and the other neutral countries.

By far the largest and most important exchange operations since the war have taken place between Great Britain and the United States. We shall briefly review the course of exchange between London and New York since August, 1914.

During the month of July, 1914, New York's adverse trade balance with Great Britain was still further increased by the abnormal quantity of American stocks and bonds liquidated on the New York Stock Exchange for European account, and selling grew in intensity with the closing of the European bourses. The climax was reached on July 30, with the closing of the London Stock Exchange, which caused the New York Stock Exchange to close its doors in self-defense on the following day.

At the beginning of the war New York, therefore, found itself with an unprecedented floating indebtedness to Europe estimated at from $250,000,000 to $300,000,000. As a result exchange became utterly demoralized and practically disappeared. Cables on London rose to $5, to $6.50 and finally to $7, and quotations became unworkable.

4. *Gold shipments from New York.*—Gold had been leaving New York in large quantities during the month of July, and more would have been shipped but for the suddenness of the crisis. Even as late as July 28, 1914, the *Kronprinzessen Cecilie* sailed from New York with a consignment of gold valued at over $10,000,000, but to avoid capture was recalled when almost in sight of England, and put back into Bar Harbor, Maine, on August 4, 1914.

Gold shipments thru other channels were impracticable, not only on account of the high war insurance rate of over one per cent but also due to the fact that it was evidently not considered advisable or expedient for even neutral nations to ship gold in war time. Every nation was holding gold for eventualities—they knew not what. Under normal conditions, New York would have been able to correct this abnormal exchange position by anticipating the fall shipments of cotton, grain and other produce by the use of finance bills. This was not possible at the outbreak of the war, tho later on, when the crops were actually harvested and shipping became less disorganized, the vast exports from the United States speedily corrected the exchanges and reversed the position.

5. *Payments thru Ottawa.*—On August 13, 1914, in order to assist the New York exchange situation, the Bank of England signified its willingness to make payments in London on New York account against the deposit of an equivalent amount in gold at Ottawa, thus eliminating the dangers and ex-

pense of an ocean shipment. This arrangement was equivalent to opening a huge credit in London, limited only by the willingness of the New York banks to part with gold. Shipments variously estimated at from $100,000,000 to $150,000,000 were made and under their influence exchange was stabilized until the effect of the fall shipments made itself felt.

The corrective measure referred to above, aided by the constantly increasing volume of American imports to Great Britain and her allies, gradually forced the rate down until par was reached in November and finally passed about the middle of December, 1914. From then exchange went steadily in favor of New York, the lowest point, $4.50 per £, being reached in the following August, equivalent to a discount of 7 per cent.

During the first eight months of 1915, Great Britain made large shipments of gold and securities from London, including the amount held in Ottawa for the account of the Bank of England, but these remittances were not sufficient to offset the unprecedented exports of munitions of war and food products to Great Britain and her Allies, amounting to over $100,000,000 per month.

6. *New York loans to Great Britain.*—It was not until after the low point was reached in August that the British Government appeared to realize the seriousness of the exchange situation and took the obvious and efficient method of correcting the rate by arranging the Anglo-French loan of $500,000,000. This

action, however, had been delayed too long to be very effective and tho it did arrest the downward trend, further assistance was necessary. Additional shipments of gold and securities, aided by loans arranged between the London and New York banks, gradually induced an upward movement which was further supported by the mobilization of American securities in London by the Imperial government for the purpose of obtaining further credit from New York, if necessary. Under these influences sterling exchange reached 4.78 in January, 1916, and since then the British authorities have stabilized or practically "pegged" the rate at about 4.76. This rate is only two per cent below the gold par of 4.86⅔ and is known as the "war par." The cost of shipping gold from London to New York, under war conditions, is between seven and nine cents per sovereign and the above rate is therefore close to the present gold importing point. The New York quotations for sterling for the past three or four years given on page 267 should be referred to.

7. *Great Britain.*—We have dealt fully with the exchange relations between London and New York and will now briefly review the other exchanges. Roughly speaking, sterling exchange has been at a premium in all belligerent countries, and at a discount in all neutral countries. The positions at the beginning of the war have been reversed in most instances and Great Britain, formerly the general creditor nation, has become a debtor to Switzerland, Spain, Holland, Scan-

dinavia and the United States, this being due in great measure to a decrease in her exports and foreign investments and an increase in her imports, principally of provisions and war supplies from these neutral countries. On the other hand, Great Britain has greatly increased her exports to her Allies, while their exports to England have decreased materially; consequently sterling exchange is at a premium in France, Italy, Russia, etc.

A study of the following table shows the value of the pound sterling in different countries from July, 1914, to January, 1917. A comparison of these rates with the par value of the £ in the first column will show when the London exchange was at a discount or premium.

When war became imminent, France proceeded to realize on her securities and call in her foreign balances; as a result funds in London and New York were rapidly exhausted and debtors in London who were under obligation to remit to Paris sent gold until the French moratorium was declared. There were practically no quotations until the middle of August, by which time the rate had risen to Fcs. 24.50, falling again in September to Fcs. 25.70 and rising to Fcs. 25.04 in December, 1914. In the spring of 1915, the effects of the heavy financing of the British government for French account commenced to be felt, and by June, the quotation had fallen to over Fcs. 26, standing in January, 1916, at Fcs. 29.85, and on January 4, 1917, at Fcs. 29.81; this, not withstanding the heavy

EXCHANGE VALUE OF POUND STERLING
JULY, 1914, TO JANUARY, 1917

		Par	July 17, 1914	Aug. to Dec., 1914, High	Low	1915, High	Low	1916, High	Low	Jan. 4, 1917
Paris	Fcs.	25.22	25.17	25.50	24.	27.80	25.08	29.02	27.73	27.81
Switzerland	Fcs.	25.22	25.18	26.	24.	25.85	24.80	25.82	23.85	24.12
Italy	Lire	25.22	25.26	28.50	24.	30.90	25.87	32.95	30.	32.78
Madrid	Pes	25.22	26.05	26.80	24.25	25.55	23.90	25.09	21.97	22.30
Amsterdam	Fl.	12.107	12.12	12.60	11.70	12.15	11.	12.52	10.46	11.69
Petrograd	R.	94.60	95.10	125.	108.	149.	110.	163.	138.	163.
Scandinavia	K.	18.16	18.25	19.30	18.30	19.55	16.60	17.37½	15.15	16.
New York	$	4.86⅔	4.87½	6.50	4.87	4.85½	4.50	4.78	4.73⅝	4.76 1/16

expenditures on the British and Canadian troops entrenched in France and Flanders.

8. *Dutch exchange.*—No specific particulars regarding the exchange or financial operations of neutral countries with the belligerents are obtainable, nor will they be until after the war for obvious reasons. It is therefore idle to attempt to explain the position of the foreign exchanges except in general terms, as the several rates do not by any means represent either the financial positions of the countries in question or their true relation to each other. Take, for instance, the case of Holland, which appears for the time to have taken London's place as the international clearing house. According to the *Economist,* the Amsterdam exchanges stood as follows in November, 1915:

	Rate	Par	Premium on Dutch Currency
Berlin	48.02½	59.26	19
Vienna	34.06¼	50.41	32½
Copenhagen	63.65	66.67	4½
London	11.22	12.11	7½
New York	239.65	248.8	3¾

It will be noticed that even the dollar was at a discount; Dutch currency has apparently become the standard of value for these centers, and the exchange markets of Holland and Scandinavia have become of importance as international clearing houses and for the time being, are taking the position generally occupied by London.

The par rate between Amsterdam and London is Fl. 12.107 to the pound sterling, and the rate obtain-

ing just before the war was a little in favor of London, Fl. 12.14. During the first week of August, the quotations were most irregular, ranging as they did from Fl. 11.90 to Fl. 12.60, but after the steadying of the exchanges by the remedial measures above referred to, the rate on London was fairly well maintained around normal, until 1915, when payments for freight and large purchases by the British government of sugar and other supplies, together with the sale of securities in New York and London, presumably for German account, combined to lower the rate of the pound to Fl. 10.85, the quotation on the 15th of January, 1916. On the 4th of January, 1917, the rate stood at Fl. 11.69.

9. *Exchange in other countries.*—Since the beginning of the war, the Italian exchange has been favorable to London and during the summer and fall of 1915 stood at about lire 26. The rate rose a little in December but dropped again on the prospect of Italy's participation in the war and stood at about lire 28 until June, 1915, from which time it has been gradually rising, and on the 15th of January, 1916, reached lire 32.35. On the 4th of January, 1917, the rate was lire 32.78.

The Russian rate of exchange before the war stood at about 94 roubles per £10. Since then the rate has gone steadily against Russia, reaching as low as 163 roubles per £10. This is due to the almost complete blockade of Russian exports, both from the Black Sea and the Baltic, and to a large increase in the value of

imports, tho a certain amount of this depreciation is due to the expansion of the paper currency. The rate on the 4th of January, 1917, was 163 roubles per £10.

Spain was favorably affected by the war as far as exchange conditions were concerned. Sterling exchange is almost invariably at a premium in Spain. Just before the war it stood at 26.10 pesetas per pound sterling (par 25.22) and during the first part of August fluctuated between pesetas 23.85 and pesetas 26.60 per pound, the higher quotation being of course in favor of Great Britain. Heavy purchases by France and England of war munitions and provisions turned the exchange in favor of Spain, where it has remained ever since, and England has even found it necessary to ship gold to Spain from time to time in order to keep the rate adjusted. The rate on the 4th of January, 1917, was 22.30 pesetas per £.

The position of the Scandinavian nations—Norway, Denmark and Sweden—was very similar to that of Holland, being adjacent to both Great Britain and Germany. Under normal conditions the Scandinavian nations are generally indebted to Great Britain and at times lean heavily on London for financial assistance. At the beginning of the war exchange was in favor of London, standing at K. 18.25 as against the par of K. 18.16, and remained favorable well into 1915, when it fell as low as K. 16.60. The fall was due to a number of causes. England's exports to these countries had practically ceased while her imports from them had increased. Russian purchases

in these countries were paid by draft on London and large amounts were also due from Great Britain for freight and the like.

10. *New York.*—Owing to abnormal conditions induced by the war New York has gradually been forced to assume the position in international finance and exchange heretofore almost exclusively occupied by London, and a wide demand for dollar exchange and dollar credits has developed. The relations between London and New York have been dealt with in a preceding section and it is necessary only to dwell briefly on some of the other exchanges. On the chart opposite page 258 will be found the New York rate of exchange with the different countries since 1914 and these should be compared with the more recent rates given below.

The closing prices on the 13th of January, 1917, for the principal exchanges quoted on the New York market were as follows:

	Par	Rate Jan. 13, 1917	Discount
Great Britain .....sovereign	4.8665	4.7580	2.2%
France .....franc	5.1826	5.84⅜	12.7%
Germany .....mark	95.28	69.25	27.3%
Italy .....lire	5.1826	6.93¼	33.8%
Russia .....roubles	51.45	29.30	43.1%
Austria .....kronen	20.26	11.36	44.2%
Brazil .....milreis	32.46	23.75	26.8%
			Premium
Holland .....guilders	40.19	40.81¼	1.5%
Switzerland .....francs	5.1826	5.03	3.0%
Greece .....drachma	19.295	20.00	3.6%
Argentina .....pesos	42.44	44.62½	5.1%
Sweden .....kroner	26.79	29.40	9.7%
Spain .....pesetas	19.20	21.20	10.4%

It will be noted that exchange with all belligerent nations is at a discount, and at a premium with all neutral nations with the exception of Brazil or, conversely, the dollar is at a premium in all belligerent countries and at a discount in all neutral countries.

The exchange between New York and Paris calls for very little comment. At the beginning of the war New York was largely indebted to Paris for stock purchases and, as with London, cable remittances between New York and Paris rose to unprecedented heights, resulting in the complete breakdown of the exchanges. As will be seen by the chart, French exchange has acted thruout in sympathy with sterling, maintaining a slightly higher level until February after which, tho still following the line of the sterling curve, it reached much lower levels of depreciation, touching fourteen per cent discount in August, 1915, or more than double that of sterling.

The extreme sympathy of the French and English exchanges is due to the fact that Great Britain has in a great measure borne the financial responsibility of the American exports to France, the adjusting payments being made between Paris and London.

The discount on foreign money or premium on the dollar means that exchange on New York is difficult to get, as there is not enough to supply the needs of the foreign centers, and consequently the cost of American goods to the foreign purchaser is correspondingly increased. Normally the situation encourages exportation from the country in question to

the United States and discourages importation from the United States. This is the natural corrective for adverse balances. Take, for instance, Great Britain; under war conditions her ability to export is greatly reduced, but her need to import is vastly increased. Continued settlements by gold shipments from Great Britain are impracticable, and from the United States' point of view, undesirable. Under these conditions the United States therefore had either to extend credit or stop exporting. The Anglo-French loan was the first large loan and similar loans in addition to gold shipments will be found necessary from time to time in order to maintain the rate.

Much prominence has been given in the financial press to the appreciation of the American dollar as compared with other exchanges, particularly with those of belligerent nations, but little or no comment has been made regarding the depreciation of the dollar itself in Holland, Spain, Sweden, Denmark and other neutral nations. As a matter of fact the dollar reached a lower discount in Holland than that yet attained at any time by the pound sterling, namely, nine per cent. In the quotations given on page 271 the dollar in both Sweden and Spain exceeds even this rate.

Holland, like Scandinavia and Switzerland, borders on the belligerent countries and carries on business with both. It is not only a great maritime power, but also a free trade country. What few duties she has, are of a fiscal rather than of a protectionist nature. Like Great Britain, these two features make her ports

vast clearing houses for cargoes from all over the world, especially for goods from the East Indies, such as sugar, spices, coffee and tobacco. In addition many of Germany's direct imports are routed thru the wonderful Dutch canal system. During the first part of the war Holland unquestionably exported a vast quantity of both home and foreign goods into Germany, especially from the United States. Her imports from that country for the year ending June, 1915, showed an increase in value of over $13,000,000 over the corresponding period of last year. The British blockade in this connection, however, was so thoro that Holland found her own requirements jeopardized, and the Netherlands Overseas Trust was incorporated. The guarantee of this company as to the destination of any cargo was accepted by the British Government. Holland, however, continued to export large quantities of her own products into Germany and apparently received payment in American securities, judging from the large number of these securities disposed of by Dutch interests in New York, thus creating a large balance in favor of Holland. These were supplemented of course by gold shipments from Germany, the latter being reflected by the large increase in gold holdings of the Netherlands banks. Notwithstanding these correctives the German mark in Holland continued for some time at a discount of about thirty two per cent.

11. *Canada.*—As New York is the exchange center of this continent, foreign exchange conditions in Can-

ada since the beginning of the war have been a reflection of those experienced in the United States. The quotations for sterling, francs, etc., differ from those in New York only by the discount or premium obtaining on New York funds in Canada. Only a brief reference to the latter, therefore, is necessary.

Under normal conditions, gold can be transferred between New York and Montreal for about 70 cents per $1,000 or 5/64 of 1 per cent on either side of par, but since the war, gold shipments have practically been discontinued and the quotations, without this steadying influence, have ranged from 1¼ per cent discount to 1 per cent premium.

Canadian funds in New York were therefore at a premium during the first few months of the war, but, in sympathy with sterling, fell to par in November and to a discount in December, and remained at a discount until August, 1915, when the proceeds of the United States loan to Canada of $45,000,000 became available. In conjunction with a number of loans made by New York to Canadian municipalities and others, this loan was sufficient to maintain the rate at about par for the remainder of the year. Since then, however, Canadian funds have been more or less at a discount in New York; or conversely, New York funds have been at a premium in Canada, tho toward the end of 1916 they fluctuated for several months around par. The course of exchange between the United States and Canada and the financial relations obtaining between the two countries have been so

fully dealt with in the press that it is unnecessary to enlarge further upon the situation.

12. *Germany.*—German exchange from the commencement of the war has been a very complex subject, and is apparently a study in economics rather than in exchange, especially so far as New York is concerned.

Practically no mark quotations were available for the first six weeks of the war or until about the middle of September, and from that time on a steady fall in the value of the mark set in. A few temporary improvements occurred, but these were immediately followed by still further depreciation.

As Germany and her Allies have been practically cut off from any direct trade with the United States it is plain that the excessive depreciation of the mark is not due to the reasons responsible for the fall in the value of the pound sterling and the franc, namely, abnormal imports of munitions and produce.

As a matter of fact the German mark is now universally at a discount, but this is not the case with the franc or pound sterling. In January, 1916, the mark was quoted in Amsterdam as low as 42 florins per 100 marks against a normal quotation of 59 florins; a discount against Berlin of nearly 29 per cent.

The cause of this universal depreciation in value of the mark cannot be found in exchange conditions. By some it is ascribed to the decline in Germany's credit due to the lack of confidence, even among neutral and friendly nations, as to her future financial

stability. At the beginning of December, 1916, the mark was quoted in Amsterdam at 32¾ per cent discount, in Switzerland at 31½ per cent, in Denmark at 30½ per cent, and in New York at 29¼ per cent discount.

13. *The Scandinavian Union.*—The Scandinavian Union is a monetary and commercial union of the three kingdoms of Denmark, Norway and Sweden. A glance at the map of Europe will show the unique position of these countries as regards Great Britain and Germany. They form as it were a little nest of neutral nations within easy distance by water of both. Notwithstanding their favorable position in regard to trade with the belligerent nations, the Union was seriously affected by the declaration of war and had to face abnormal conditions from the outside. These were due principally to the difficulty of obtaining sterling exchange to meet obligations for imports and other indebtedness maturing in England, and even the great increase in their exports failed to correct the exchange. Sweden declared a moratorium on August 7, 1914, Denmark on August 21, and Norway on August 25. Notification was given by the latter that the Bank of Norway would not redeem notes in gold. The monetary system in the three countries has as its unit the krone at a par value of 26.797 cents or 1s. 1½d. Both London and Copenhagen quote on a basis of kroner per pound sterling (par K 18.16 per pound). Any increase in the rate would be in favor of England as she would receive more kroner per

pound. This would, therefore, operate against the Union. In Copenhagen, just before the war, the quotation stood at K. 18.30, rising on August 1 to K 18.50 and subsequently reaching as high as K. 19.70. In Norway and Sweden the rates run practically concurrently with Denmark. In view of the difficulty of remitting to London under these circumstances, even for indebtedness incurred since the war commenced, various expedients were adopted by some of the banks. The most general method was to credit the proceeds of the collection to a kroner account in the name of the foreign bank, leaving to the latter the problem of realizing the amount in home funds.

British trade with these countries fell off to a great extent, due to the exchange situation as well as to the more attractive [1] prices which Germany was forced to offer. There is no doubt that the risk of transportation owing to mines and submarines also acted as a deterrent.

As regards the trade relations of these countries with Germany direct information is naturally not available. It is well known, however, that Germany has imported not only vast quantities of the products of the Union, but also immense quantities of cotton, wheat, etc., originating in other countries, particularly the United States. The latter conclusion can be formed by reference to the export reports of the

[1] The Copenhagen correspondent of the Economist points out that the effect on that market of a premium of 5 per cent on the pound sterling and a discount of 7 per cent on the mark as compared with the Danish currency was to turn Danish trade from England to Germany.

United States. Norway, for instance, for the year ending June, 1915, imported from the United States, goods to the value of $39,075,000, as against only $9,700,000 the previous year. Sweden, for the same period, shows $78,274,000 as against only $14,644,000 in 1914. These amounts are out of all proportion to the amounts given for home consumption.

German exchange, as elsewhere, was at a heavy discount and Germany endeavored to correct it with gold shipments from time to time, but the effect was only temporary and she was finally forced to pay for her Scandinavian purchases in gold. An interesting side-light on these gold payments was the reappearance in London of a large number of the sovereigns known to have formed part of the German war chest at Spandau and which were allocated for that purpose out of the French war indemnity of 1872. These sovereigns were not only identified by their date and design (Victoria effigy "shield reversed") but some of the coins were received in London from Scandinavia in the identical labeled bags in which they had been dispatched from the Bank of England to Germany for French account forty-three years ago.

REVIEW

What has been the effect of war on international exchange?

What is a moratorium and why has it been applied by most countries?

What tendency toward fluctuation do exchanges show under normal conditions and what changes has the European war made in them?

Discuss the exchange relations between London and New York as a result of the war and describe the corrective measures which were introduced.

What effect has the war had on commercial exchange in neutral and in belligerent countries?

Discuss foreign exchange conditions in Canada since the beginning of the war.

VALUES OF FOREIGN COINS

In pursuance of the provisions of section 25 of the act of August 27, 1894, the Secretary of the Treasury has proclaimed the following estimate by the Director of the Mint of the values of pure metal contents of foreign coins to be the values of such coins in terms of the money of account of the United States, to be followed in estimating the value of all foreign merchandise exported to the United States during the quarter beginning April 1, 1916, expressed in any such metallic currencies.

Entries of merchandise liquidated upon the values proclaimed are subject to reliquidation upon the order of the Secretary of the Treasury whenever satisfactory evidence is produced showing that the values in United States currency of the foreign money specified in the invoices were at the date of certification at least 10 per cent more or less than the proclaimed values.

ESTIMATE BY DIRECTOR OF THE MINT OF THE VALUES OF FOREIGN COINS.

Country	Legal standard.	Monetary unit	Value in terms of United States money.	* Remarks
Argentine Republic	Gold	Peso	$0.9648	Currency: Depreciated paper, convertible at 44 per cent of face value.
Austria Hungary	Gold	Crown	.2026	
Belgium	Gold and silver	Franc	.1930	Member of Latin Union; gold is the actual standard.
Bolivia	Gold	Boliviano	.3893	12½ bolivianos equal one pound sterling.
Brazil	Gold	Milreis	.5462	Currency: Government paper; exchange rate about 25 cents to the milreis.
British colonies in Australasia and Africa..	Gold	Pound sterling	4.8665	
Canada	Gold	Dollar	1.0000	
Central Am. States:				
Costa Rica	Gold	Colon	.4653	
British Honduras ..	Gold	Dollar	1.0000	
Nicaragua	Gold	Cordoba	1.0000	
Guatemala	Silver	Peso	.4211	Guatemala: Currency, inconvertible paper; exchange rate about 40 pesos equal $1.
Honduras				Honduras: Currency, bank notes.
Salvador				Salvador: Currency, convertible into silver on demand.

TABLE 1

Country	Legal standard	Monetary unit	Value in terms of United States money	Remarks
Chili	Gold	Peso	.3650	Currency: Inconvertible paper; exchange rate, approximately, $0.14.
China	Silver	Tael—Canton	$0.6883	The tael is a unit of weight, not a coin; the customs unit is the Hai Kwan tael.
		Tael—Shanghai	.6306	
		Dollar—Hong Kong	.4541	
Colombia	Gold	Dollar	1.0000	Currency: Inconvertible paper; exchange rate, approximately, $105 paper to $1 gold.
Cuba	Gold	Peso	1.0000	
Denmark	Gold	Crown	.2680	
Ecuador	Gold	Sucre	.4867	
Egypt	Gold	Pound (100 piasters)	4.9431	The actual standard is the British pound sterling, which is legal tender for 97½ piasters.
Finland	Gold	Mark	.1930	
France	Gold and silver	Franc	.1930	Member of Latin Union; gold is the actual standard.
German Empire	Gold	Mark	.2382	
Great Britain	Gold	Pound sterling	4.8665	
Greece	Gold and silver	Drachma	.1930	Do.
Hayti	Gold	Gourde	.9647	Currency: Inconvertible paper; exchange rate, approximately, $0.16.
India (British)	Gold	Rupee	.3244	15 rupees equal to 1 pound sterling.
Italy	Gold and silver	Lira	.1930	Member of Latin Union; gold is the actual standard.
Japan	Gold	Yen	.4985	
Liberia	Gold	Dollar	1.0000	Currency: Depreciated silver token coins. Customs duties are collected in gold
Mexico	Gold	Peso	.4985	Mexican exchange rate violently fluctuating, approximately, $0.15.
Netherlands	Gold	Florin	.4020	
Newfoundland	Gold	Dollar	1.0139	
Norway	Gold	Crown	.2680	
Panama	Gold	Balboa	1.0000	
Paraguay	Silver	Peso	.4211	Currency: Depreciated paper; exchange rate 1,550 per cent.
Persia	Gold and silver	Kran	.1700	This is the value of the gold kran. Currency is silver circulating above its metallic value; exchange value of silver kran, approximately, $0.0875.

TABLE 1 (*continued*)

Peru	Gold	Libra	4.8665	
Philippine Islands	Gold	Peso	.5000	
Portugal	Gold	Escudo	1.0806	Currency: Inconvertible paper; exchange rate, approximately, $0.07½.
Roumania	Gold	Leu	.1930	
Russia	Gold	Ruble	.5146	
Santo Domingo	Gold	Dollar	1.0000	
Serbia	Gold	Dinar	.1930	
Siam	Gold	Tical	.3709	
Spain	Gold and silver	Peseta	.1930	Valuation is for the gold peseta; currency is silver circulating above its metallic value; exchange value, approximately, $0.20.
Straits Settlements	Gold	Dollar	.5678	
Sweden	Gold	Crown	.2680	
Switzerland	Gold	Franc	.1930	Member of Latin Union; gold is the actual standard.
Turkey	Gold	Piaster	.0440	100 piasters equal to the Turkish £.
Uruguay	Gold	Peso	1.0342	
Venezuela	Gold	Bolivar	.1930	

* The exchange rates shown under this heading are not to take the place of the consular certificate where it is available.

TABLE 1 (*concluded*)

MONEYS OF ACCOUNT USED IN THE PRINCIPAL COUNTRIES OF THE WORLD

"S" SIGNIFIES SILVER STANDARD—"G. E." GOLD EXCHANGE STANDARD

	Country	Monetary Unit	Approximate Equivalents Dollars $ c	Sterling £	s	d
S.	*Abyssinia* (1)	Maria Theresa dollar and talari	.41.362		1	8.396
S.	*Afghanistan*	Rupee (16 annas) India	.16.216			7.996
	Alaska (U. S. A.)	Dollar (100 cents) U. S. A.	1.00.000		4	1.316
	Algeria (France)	Franc (100 centimes) Latin Union	.19.295			9.515
G. E.	Argentine Republic	Peso (100 centavos)	.96.476		3	11.578
		Paper	.42.449		1	8.956
	Australia (Gt. Brit.)	Pound sterling, stg.	4 86.656	1	0	0
	Austria Hungary	Krone (100 heller)	.20.263			9 973
S.	*Baluchistan* (Gt. Brit.)	Rupee (16 annas) India	32 444		1	4
	Belgium	Franc (100 centimes) Latin Union	.19.295			9 515
	Bolivia (2)	Boliviano (100 centavos)	.38 932		1	6.931
	Borneo (Gt. Brit.)	Pound sterling, stg.	4.86 656	1	0	0
G. E.	*Brazil* (3)	Milreis (1,000 reis)	.32.444		1	4
	British Guiana (Gr. Brit.)	Pound sterling, stg.	4.86 656	1	0	0
	British Honduras (Gt. Brit.)	Dollar (100 cents)	1 00 000		4	1.316
	Bulgaria	Lev (100 stotinki) Latin Union	.19.295			9 515
	Burma (Gt. Brit.)	Rupee (16 annas) India	.32.444		1	4
	Canada (Gt. Brit.)	Dollar (100 cents)	1.00.000		4	1.316
	Cape Colony (Gt. Brit.)	Pound sterling, stg.	4 86 656	1	0	0
G. E.	Ceylon (Gt. Brit.)	Rupee (100 cents) India	.32.444		1	4
G. E.	Chili	Peso (100 centavos) gold	.36.499		1	6
		Paper	.20.000			9.862
S.	*China*					
	Hongkong (Gt. Brit.)	Dollar (100 cents)	.42.898		1	9.153
	Shanghai	Tael (10 mace or 100 candareens)	.69 000		2	10.024
	Colombia	Peso (100 centavos)	1.00.000		4	1.316
	Congo Free State (Belgium)	Franc (100 centimes) Latin Union	.19 295			9.515
	Costa Rica	Colon (100 centimos)	.46.535		1	10.946
	Cuba (U. S. A.)	Peso (100 centavos)	1.00.000		4	1.316
	Denmark	Krone (100 ore) Scan. Union	26.799		1	1.216
	Dominican Republic	Dollar (100 cents)	1 00 000		4	1.316
	Dutch Guiana (Holland)	Guilder (100 cents) Holland	.40.196		1	7.823
	Ecuador	Sucre (100 centavos) 1/10 of £	.48.665		2	0

TABLE 2

	Egypt (Gt. Brit.)	Pound (100 piastres or 1,000 milliemes)	4.94.29	1	0	3.733
	England (Gt. Brit.)	Pound sterling, stg.	4.86.656	1	0	0
S.	Eritrea (Italy)	Eritrea dollar	.39.786		1	7.618
	Faroe Islands (Denmark)	Krone (100 ore) Scan. Union	.26.799		1	1.216
	Finland (Russia)	Finmark (100 pennia) Scan. Union	.19.295			9.515
	Fiji (Gt. Brit.)	Pound sterling, stg.	4.86.656	1	0	0
	France	Franc (100 centimes) Latin Union	.19.295			9.515
	German Empire	Mark (100 pfennige)	.23.821			11.748
	Great Britain	Pound sterling (20 shillings or 240 pence or 960 farthings) stg.	4.86.656	1	0	0
	Greece (2)	Drachma (100 lepta) Latin Union	.19.295			9.515
S.	*Guatemala*	Peso (8 reales or 100 centavos)	.44.46		1	9.923
	Hawaii (U. S. A.)	Dollar (100 cents) U. S. A.	1.00.000		4	1.316
	Haiti	Gold gourde (100 centimes)	.25.000		1	0.329
	Holland	Guilder or florin (100 cents) Holland	.40.196		1	7.823
S.	*Honduras*	Peso (100 centavos)	.39.786		1	7.618
	Iceland (Denmark)	Krone (100 ore) Scan. Union	.26.799		1	1.216
G. E.	India (Gt. Brit.)	Rupee (16 annas or 192 pies)	.32.444		1	4
S.	*Indo-China* (France)	Piastre (100 cents)	.42.968		1	9.182
	Italy	Lira (100 centesimi) Latin Union	.19.295			9.515
	Japan	Yen (100 sen) Japan	.49.846		2	0.582
	Java (Holland)	Florin (100 cents) Holland	.40.196		1	7.823
	Korea (Japan)	Won (100 chon) Japan	.49.846		2	0.582
	Liberia (2)	Dollar (100 cents)	1.00.000		4	1.316
	Luxemburg	French, German and Dutch money cur.				
	Manchuria (Japan)	Yen (100 sen) Japan	.49.846		2	0.582
	Martinique (France)	Franc (100 centimes) Latin Union	.19.295			9.515
G. E.	Mexico	Peso (100 centavos)	.49.846		2	0.582
	Monaco	Franc (100 centimes) Latin Union	.19.295			9.515
	Montenegro	Austrian and Russian money current ... Perper (100 paras)	.20.263			9.993
S.	*Morocco*	Spanish and French money current ... Rial (20 belions)	.39.786		1	7.618
	Natal (Gt. Brit.)	Pound sterling, stg.	4.86.656	1	0	0
	Netherlands	See Holland.				
	Newfoundland (Gt. Brit.)	Dollar (100 cents)	1.01.387		4	1.994
	New Zealand (Gt. Brit.)	Pound Sterling, stg	4.86.656	1	0	0
G. E.	Nicaragua	Cordoba (100 centavos) U. S. A.	1.00.000		4	1.316
	Norway	Krona (100 ore) Scan. Union	.26.799		1	1.216
G. E.	Panama	Balboa (2 pesos or 100 cents) U. S. A.	1.00.000		4	1.316
S.	*Persia*	Kran (20 shahis)	.07.328			3.613
	Peru	Libra (10 soles, 100 dineros, 1,000 centavos)	4.86.656	1	0	0
G. E.	Philippine Is. (U. S. A.)	Peso (100 centavos) U. S. A.	.50.000		2	0.658
	Porto Rico (U. S. A.)	Dollar (100 cents) U. S. A.	1.00.000		4	1.316

TABLE 2 (*continued*)

	Country	Monetary Unit	Approximate Equivalents Dollars $ c	Sterling £	s	d
G. E.	Portugal (2)	Escudo (100 centavos, 1,000 reis)	1.08.056		4	5.284
	Roumania	Leu (100 bani) Latin Union	.19.295			9.515
	Russia	Rouble (100 kopecks)	.51.456		2	1.371
S.	Salvador	Peso (100 centavos)	.39.786		1	7.618
	Santo Domingo	See Dominican Republic.				
	Serbia	Dinar (100 paras) Latin Union	.19.295			9.515
G. E.	Siam	Dos (10 tieals, 40 salungs, 1,000 satangs)	3.70.84		15	2.861
	Sou. Africa (Br.) (Gt. Brit.)	Pound sterling, stg.	4.86.656	1	0	0
	Spain 2	Peseta (100 centesimos) Latin Union	.19.295			9.515
G. E.	Straits Settlements (Gt. Brit.)	British dollar (100 cents)	.56.776		2	4
	Sumatra (Holland)	Florin (100 cents) Holland	.40.196		1	7.823
	Sweden	Krona (100 ore) Scan. Union	.26.799		1	1.216
	Switzerland	Franc (100 centimes) Latin Union	.19.295			9.515
	Tunis (France)	Franc (100 centimes) Latin Union	.19 295			9.515
	Turkey	Lira (100 piastres, 4,000 paras)	4.39.66		18	0.8
	United States	Dollar (100 cents) U. S. A.	1.00.000		4	1.316
	Uruguay	Peso (100 centesimos)	1.03.424		4	3.004
	Venezuela	Peso (bolivar, 100 centavos) Latin Union	.19.295			9.515
	West. Ind. (Br.) (Gt. Brit.)	Pound sterling, stg.	4.86.656	1	0	0
	Antigua	Bermuda				
	Bahamas	Dominica				
	Barbadoes	Grenada				
	St. Kitts	Tobago				
	St. Larcia	Trinidad				
	St. Vincent	Jamaica				
	Turk's Island					

1 In certain countries (mostly in Asia and South America) a nominal gold or silver standard exists, but there is no effective system of standard values. and the value of coins is consequently of an uncertain and fluctuating value.

The names of such countries are in italics.

In several of these countries the monetary system is in a state of transition from a silver to a gold standard.

In South American countries large quantities of paper money (generally worth much less than the face value) are in circulation.

All silver values are calculated on a basis of 25.09 pence per standard ounce (925 fine) or 55 cents per ounce fine.

2 Circulating medium is paper.

3 Present currency is government notes guaranteed at the rate of 16 pence per milreis or 32.444 cents, same as rupee. The theoretical gold milreis weighs .89645 grammes, 917 fine, worth 54.615 cents.

TABLE 2 (*concluded*)

MONEYS IN ACTUAL USE

Equivalents are given in United States money and the value in any other currency can be found by multiplying the equivalent by the value of United States in foreign currency. For instance, the value of the franc in the table is given as .19295; multiply by the value of the dollar in English money, .49316 pence, and we get .95156 pence as the value of the franc in sterling.

The coins marked with one asterisk belong to countries on the silver basis; therefore the values fluctuate, but in this table they are calculated on a basis of 25 3/32 pence per standard .925 fine, or 55c. per ounce fine.

The coins marked with two asterisks are on a paper basis and are valued only approximately.

Designation	Where Used	Equivalent	Value
Abassi	Afghanistan	½ of a rupee	$ .05405
Abassi	Persia	1/5 of a kran	.01465
Alexander	Bulgaria	20 leva	3.8589
Alfonsino	Spain	25 pesetas	4.82375
Anna (s)	India	1/16 of rupee	.02028
Att	Siam	1/64 of tical	
Balboa (s)	Panama	100 centesimos	1.00
Banu (i)	Roumania	1/100 of leu	.00193
Batz (pl. batzen)	Switzerland	10 centimes	.0193
Belion	Morocco	1/20 rial	.01989
Besa (e)	Abyssinia	1/100 talari	.00415
Besa (e)	Eritrea	1/100 tallero	.00398
Bit	Danish West Indies	1/100 of franc	.00193
Bolivar (cs)	Venezuela	100 centimos	.19295
Boliviano (s)	Bolivia	100 centavos	.38932
British dollar	Used in Orient		.42898
Candareen	China	1/100 of tael	
Cash	China	1220 cash = 1 Haikwan tael	
Cash	Hongkong	1/1000 of a dollar	
Cent (s)	Newfoundland	1/100 of a dollar	.01014
Cent (s)	United States, Canada, Cuba, Hawaii, Porto Rico, British West Indies, British Guiana, British Honduras, Dominican Rep., Liberia	1/100 of dollar	.01
Cent (s)	Hongkong and China	1/100 of dollar	.00429
Cent (s)	China	1/100 of tael (kuping)	.00646
Cent (s)	China	1/100 of tael (Haikwan)	.00663
Cent (s)	Straits Settlements and Federated Malay States	1/100 of dollar	.00567

TABLE 3

Designation	Where Used	Equivalent	Value
Cent (s)	Netherlands	1/100 of guilder	$ .00402
Cent (s)	Ceylon, British East Africa, Zanzibar, Somaliland (Italian)	1/100 of rupee	.00324
Centavo (s)	Portugal	1/100 of escudo	.01080
Centavo (s)	Nicaragua (new)	1/100 of cordoba	.01
Centavo (s)	Philippines	1/100 of peso	.00500
Centavo (s)	Mexico	1/100 of peso	.00498
Centavo (s)	Peru	1/100 of sol	.00487
Centavo (s)	Ecuador	1/100 of sucre	.00487
Centavo (s)	Argentina	1/100 of peso (gold)	.00965
Centavo (s)	Argentina	1/100 of peso (paper)	.00424
Centavo (s)	Honduras and Salvador	1/100 of peso	.00398
Centavo (s)	Bolivia	1/100 of boliviano	.00389
Centavo (s)	Chile	1/100 of peso (paper)	.00200
Centavo (s)	Chile	1/100 of peso (gold)	.00365
Centavo (s)	Guatemala	1/100 of peso (paper)	.00050
Centavo (s)	Nicaragua (old)	1/100 peso (paper)	.00060
Centavo (s)	Paraguay	1/100 of peso (paper)	.00070
Centen	Cuba	25 pesetas	4.82375
Centesimo (s)	Uruguay	1/100 of peso	.01034
Centesimo (s)	Panama	1/100 of balboa	.01
Centesimo (i)	Italy	1/100 of lira	.00193
Centimo (s)	Costa Rica	1/100 of colon	.00465
Centimo (s)	Spain	1/100 of peseta	.00193
Centimo (s)	Venezuela	1/100 of bolivar	.00193
Centime (s)	France, Belgium, Monaco, and Switzerland	1/100 of franc	.00193
Centime (s)	Haiti	1/100 of gourde	.00250
Centime (s)	Indo-China	1/100 of piastre	.00430
Colon (es)	Costa Rica	100 centimos	.46536
Condor	Chile	20 pesos	7.2995
Condor	Colombia	10 pesos	10
Condor	Ecuador	10 sucres	4.86656
Conto	Brazil	1000 milreis	
Conto	Portugal	1000 milreis	
Cordoba	Nicaragua (new)	100 centavos	1.00
Coroa	Portugal	10 milreis	10.8046
Crore	India	100 lacs of rupees	
Crown	United Kingdom	5 shillings	1.21666
Crown		See Krona, krone, coroa.	
Dime	United States	10 cents	.10
Dinar (s)	Servia	100 paras	.19295
Dinar (s)	Persia	1/50 of shahi	.0007
Dinero	Peru	10 centavos	.0487
Dirhem	Morocco	1/10 Hassani dollar	.0466
Dollar	Abyssinia	16 guerches 1 talari	.46

TABLE 3 (*continued*)

Dollar	Philippines	100 centavos ..... .50
Dollar	Argentina	1 peso (gold) ..... .965
Dollar	China	100 cents (72% of Haikwan tael) .. .468
Dollar	Haiti	1 gourde (gold) ..... .965
Dollar	Uruguay	100 centesimos 1.03424
Dollar (s)	Newfoundland	100 cents 1.01387
Dollar (s)	United States, Hawaii, Porto Rico, Canada, Cuba, British West Indies, British Guiana, British Honduras, Dominican Rep., Liberia	100 cents 1.00
Dollar (s)	Straits Settlements and Federated Malay States	100 cents ..... .56776
Dollar (s)	China, Hongkong	100 cents ..... .42898
Doubloon (gold)	Chile	10 pesos 3.6497
Drachma (i)	Greece	100 lepta ..... .19295
Ducat	Netherlands	5.70 guilden 2.28267
Ducat	Austria	11.29 kronen 2.28792
Eagle	United States	10 dollars ..... 10.
Escudo (gold)	Chile	5 pesos 1.8248
Escudo (s)	Portugal	100 centavos 1.08056
Farthing	United Kingdom	¼ of a penny ..... .00505
Filler	Hungary	1/100 of korona ..... .00203
Florin	Austria-Hungary	2 kronen ..... .4052
Florin	United Kingdom	2 shillings ..... .4866
Florin (s)	Netherlands	100 cents ..... .40196
Franc (s)	France, Belgium, Monaco, and Switzerland	100 centimes ..... .19295
Gourde (new)	Haiti	100 centimes ..... .25000
Gourde (gold) old	Haiti	100 centimes ..... .965
Guerche	Abyssinia	1/16 of a talari ..... .0259
Guilder	Austria-Hungary	1 florin ..... .4052
Guilder (Iden)	Netherlands	100 cents ..... .40196
Haikwan tael	China	1⅓ oz. avoir of silver ..... .65
Hassani dollar	Morocco	1 rial ..... .4663
Half crown	United Kingdom	2 shillings and sixpence ..... .60833
Heller	Austria	1/100 of krone ..... .00203
Heller	German East Africa	1/100 of rupee ..... .00317
Imperial kruetzer	Russia	15 roubles 7.71839
Kopeck (s)	Russia	1/100 of rouble ..... .00515
Korona	Hungary	100 filler ..... .20263
Kran (s)	Persia	20 shahis ..... .07328
Krona (or)	Sweden	100 ore ..... .26799
Krone (er)	Denmark and Norway	100 ore ..... .26799
Krone (n)	Austria	100 heller ..... .20263
Krone (n)	Germany	10 marks 2.38209
Lac or Lakh	India	100,000 rupees .....

TABLE 3 (*continued*)

Lepton (pta)	Greece	1/100 of drachma	$ .00193
Leu (i)	Roumania	100 bani	.19295
Lev (a)	Bulgaria	100 stotinki	.19295
Libra (s)	Peru	10 soles	4.86656
Lira	Egypt	1 Egyptian pound	4.94307
Lira (e)	Italy	100 centesimi	.19295
Lira	Turkey	1 Turkish pound	4.39642
Louis	France	20 francs	3.859
Levant dollar	Austria	Maria Theresa thaler	.41362
Mace	China	1/10 tael	.065
Maria Theresa thaler	Northeast Coast Africa	100 cents	.41362
Mark	Germany	100 pfennige	.23821
Markka (a)	Finland	100 pennia	.19295
Medjidie (silver)	Turkey	20 piastres	.86928
Medjidie (gold)	Turkey	100 piastres	4.39642
Menelik dollar	Abyssinia	Maria Theresa thaler	
Mill	United States	1/10 of a cent	.001
Millieme	Egypt	1/10 piastre	.00494
Milreis	Brazil	1000 reis (gold)	.54615
Milreis	Brazil	1000 reis (paper)	.32444
Milreis	Portugal (old)	1000 reis	1.08046
Mocha dollar	Arabia	Piastre	.405
Napoleon	France	20 francs	3.859
Ochr-el-guerche	Egypt	1/10 piastre	.00494
Ore	Denmark, Sweden and Norway	1/100 of krone (a)	.00268
Para (s)	Servia	1/100 of dinar	.00193
Para (s)	Montenegro	1/100 of perper	.00203
Para (s)	Egypt	1/4 of milleme	.00123
Para (s)	Turkey	1/40 of piastre	.00109
Penni (a)	Finland	1/100 of markka	.00193
Penny (ies)	United Kingdom, Australia, New Zealand, and majority of British Colonies	1/12 of shilling	.02028
Perper (a)	Montenegro	100 paras	.20263
Peseta (s)	Spain	100 centimos	.19295
Peso (s)	Argentina (gold)	100 centavos	.96475
Peso (s)	Argentina (paper)	100 centavos	.42449
Peso (s)	Uruguay	100 centesimos	1.03424
Peso (s)	Chile	100 centavos (paper)	.20
Peso (s)	Chile	100 centavos (gold)	.365
Peso (s)	Colombia	100 centavos (paper)	.01
Peso (s)	Guatemala	100 centavos (paper)	.05
Peso (s)	Nicaragua (old)	100 centavos (paper)	.06
Peso (s)	Paraguay	100 centavos (paper)	.07
Peso (s)	Honduras and Salvador	100 centavos	.39786
Peso (s)	Mexico	100 centavos	.49846

TABLE 3 (*continued*)

Peso (s)	Philippines	100 centavos	.50
Peso (s)	Panama (old), Half-Balboa	100 centavos	.50
Peso (Spanish gold)	Cuba	100 centavos	.96475
Pfennig (e)	Germany	1/100 of mark	.00238
Piastre (s)	Egypt	1/100 of Eg. pound	.04943
Piastre (s)	Turkey	1/100 of T. pound	.04396
Piastre (s)	Indo-China	100 centimes	.42968
Pice (s)	India	1/4 anna	.00507
Pie (s)	India	1/3 pice or 1/12 anna	.00169
Pound (sterling)	United Kingdom, Australia, New Zealand, and other British Colonies	20 shillings	4.86656
Pound (Egyptian)	Egypt	100 piastres	4 94307
Pound (Turkish)	Turkey	100 piastres	4.39642
Pound (Peruvian)	Peru	100 centavos	4.86656
Reichsmark	Germany	100 pfennige	.23812
Real (reis)	Portugal	1/1000 of milreis	.00108
Real (reis)	Brazil	1/1000 of milreis (gold)	.00054
Real (reis)	Brazil	1/1000 of milreis (paper)	.00032
Rial	Morocco	20 belions	.4663
Rin	Japan	1/10 of sen	.00049
Rouble	Russia	100 kopecks	.51456
Rupee	Afghanistan	12 shahis—72 pice	.16216
Rupee (s)	Ceylon, British East Africa, Zanzibar, Italian Somaliland	100 cents	.32464
Rupee (s)	India	16 annas	.32444
Rupee (s)	German East Africa	100 heller	.31761
Satang (s)	Siam	1/100 tical	.00371
Sen	Japan	1/100 yen	.00498
Shahi (s)	Persia	1/20 kran	.00366
Shilling (s)	United Kingdom, etc.	1/20 of pound	.24333
Sol (es)	Peru	1/10 of libra	.48666
Soldo (i)	Italy	5 centesimo	.00964
Sou	France	5 centimes	.00964
Sovereign	United Kingdom	20 shillings	4.86656
Stiver	Netherlands	5 cents	.02009
Stotinka (i)	Bulgaria	1/100 of lev	.00193
Sucre (s)	Ecuador	100 centavos	.48666
Tael (Haikwan)	China	1 1/3 oz. avoir of silver	.66367
Tael (Kuping)	China	100 cents	.64659
Tael (Haikwan)	China	100 cents	.66367
Talari	Abyssinia	100 bese	.41452
Tallero (i)	Eritrea	100 bese	.39786
Thaler (Maria Theresa)	Northeast Coast of Africa	100 cents	.41362
Tical	Siam	100 satang	.37085
Venezolans	Venezuela	5 bolivars	.965
Yen	Japan	100 sen	.49846
Yuan	China (Chinese dollar)	100 cents	.42878

TABLE 3 (*concluded*)

MONEY SYMBOLS

$	Dollar, milreis,[1] peso.
$c/l	Paper peso in Argentina, c/l meaning curso legal (legal tender).
$M/C	Paper peso in Chile, m/c meaning moneda corriente (current money).
$m/n	Paper peso in Argentina, m/n meaning moneda nacional (national money).
$oro	Gold peso in Chile.
$o/s	Gold peso in Argentina, o/s meaning oro sellado (coined gold).
S$ or SS$	Dollar in Straits Settlements.
£	Pound sterling in the British Empire.
£E or LE	Pound in Egypt.
LP or L.p	Pound in Peru.
£T or LT	Pound in Turkey.
/	Shillings in the British Empire, 10/6, 10 shillings and 6 pence.
B.	Balboa in Panama. Boliviano in Bolivia.
B. or Bol.	Bolivar in Venezuela.
c.	Cent in the United States and Canada.
c.	Centavo. Centime.
D.	Dinar in Servia.
d.	Pence in the British Empire.
Dr.	Drachma in Greece.
f. or fl.	Florin.
fr.	Franc.
K.	Krans in Persia.
Kr.	Krona or krone in Austria, Hungary, Denmark, Norway and Sweden.
L.	Lira.
M. or Mk.	Mark.
P.	Peso.
Pi. or pias.	Piaster.
Ptas.	Pesetas in Spain.
R. or Ro.	Rouble.
R., Re. or Rs..	Rupee or rupees in India.
Rs.	Reis in Brazil or Portugal.
S.	Sucre in Ecuador.
s. or sh.	Shillings in the British Empire.
Tls.	Taels in China.

[1] In expressing sums in milreis the $ is used practically as a period, thus 100 milreis and 225 reis is written 100$225.

TABLE 4

INDEX

Acceptances,
Letters of credit in London, 138–39, 143; Draft in London, 140; In Germany, 214–15
See also Dollar Acceptances

Arbitrage,
Definition of, 155; Transaction explained, 155–57; Parities, table for, 157–58; Stock parity, 158; Chain rule calculation, 159–60; Example of simple, 160–62; Compound arbitrage problem, 162–64; Gold shipments, triangular operation for, 164–65

Argentina,
Currency and gold standard, 229; Legal tender, 229; Quotations, 230

Bankers' Long Bills,
Form of draft, 96, 97, 101; Rates of interest, 166–67
See also Long Exchange

Bank of England Rate,
Importance of, 169–70; Minimum discounts, 171; Margraff on, 171–73

Bank Rate,
Bank of England fixes, 167–68; In New York, 168

Bills of Exchange,
Gold redemption for, illustrated, 46–47; Short and long exchange, 89–90; Sight drafts, 90–93; Purchasing demand drafts, 91–94; Cables, abnormal rates for, 94–96; Long time drafts, 96–106; Application of interest rate, 98–100; Commercial long bills, 100–01; Bankers' long bills, 101; Purchase risks, 102–03; Commercial credit application illustrated, 103–06; Letters of credit, forms of, 106–08; Commercial bills of exchange, 128–29; Purchase of, 198–200; Sterling exchange table, 198; Examples of rate calculation, 199–200; Foreign quotations, 229–30

Brazil,
Government notes, 230; Paper milreis depreciation, 230–32; Export and import, 231–32

Cables,
Identity to checks, 94; Rates since the war, 95; Summary of conditions by Margraff, 95–96

Chain Rule Exchange Calculation, 159–60

Chile,
Paper standard, 236; Notes issued against gold, 236–37

China,
Silver standard, 233; Value of taels, 233–34

Circular Notes, Form of remittance, 82, 83

Clare, George, Author of "Foreign Exchange," 145

Coinage Rates,
Distinguishing exchange rates, 50; Price of sovereigns at U. S. mint, 50; Gold eagles in England, 50; Value of gold in Great Britain, 188, 189; In United States, 189, 190; Mint par calculation, 224–25; Value of foreign coins, 281–86; Moneys in use, 287–91

Commercial Letters of Credit,
Form of, 105, 106–07; Bank issuance, 107; Importance, 108; Method illustrated, 118; Advantage to importer, 137; Foreign exchange and imports, 137–43; Granting acceptances, 138–39

Commercial Long Bills,
On foreign debtors, 97, 100–01; Payment bills, 100; Acceptance bills, 101; Commercial bills of exchange, 128–29
See also Long Exchange

Conversion,
When necessary, 55–56; Rule for fixed exchange, 56; Dollars into foreign currency, 56; Foreign currency into dollars, 57; Rule for movable exchange, 57; Dollars into francs, 57; Francs into dollars, 57; Exchange tables, 59; Demand sterling sold, 110; Sterling exchange, 195–97; Francs into dollars, 206. 207; Fractional quotation, 206–07; German rules, 217–18; Dutch exchange, 223

Country Checks,
Collection methods, 18–19; Branch banks needed, 19; Federal Reserve system, 19–31
Course of Exchange,
London quotations, 191, 194; Royal Exchange methods, 193; When two rates are quoted, 195
Crossed Check, Banking practice for, 111
Currency Shipments,
Denver to New York, 7–11; Maintaining balances, 8–9, 17; Bases of cost, 9; Gold shipments, 9–10, 16; Sub-treasury settlements, 12; Supply and demand, 14–15; Gold settlements and Federal Reserve banks, 30–31; Expense of, 34–35

Demand and Supply,
Shipping currency, 7–8, 10–11; Exchange adjustments, 13–15; Affects rates, 16
Documentary Bills, Protection of buyer, 101, 102–06
Dollar Acceptances,
National Bank Act prohibits, 131–32; Jacobs on, 132–33; Federal Reserve Act provides for, 133–34
Dollar Credits,
Financing exports, 130–31; Imports, 138
Domestic Exchange,
Definition of, 1; Illustration, 1–2; Banks in U. S., 2–3; Check on debtor's bank, 2–3; Collecting out of town checks, 3; Correspondents, 3–4; New York the financial center, 4; N. Y. exchange in Denver, 4–8; "Business man's money," 5; N. Y. exchange illustrated, 6–7; Currency shipments, 7–15; Rates, basis of charges, 9–12, 16; Cost of shipping gold, 9–12; Quoted rates, 11; Methods of increasing deposits, 11; Settlements thru subtreasuries, 12; Demand and supply, 13–16; When interest rates rise, 14–15; Commodity viewpoint of, 15–17; Determining rates, 16
See also Federal Reserve Bank clearings.
Draft Issues,
Practice for, 62–67; Demand drafts, 62, 90–93; Sterling drafts, 64; Letter of advice, 64–66; Specimen forms and signatures, 66; Determining cost, 66–67; Sundry practice for, 114; History of, in London, 140; Finance bills, 144–50; Germany, 215–16
Dutch Exchange,
Florin the monetary unit, 222; Conversion, 223–24; Long bills, 223; Fractional rates, 224; Effect of war on, 268–69, 274

Escher, Franklin,
Defines finance bills, 144; On Dealing in futures, 152–54
Exchange Quotations,
Sterling exchange universal, 225–26; United States supplying capital, 226; War affects, 258–79
See also Quotations

Federal Reserve Act,
Provides for bank acceptances, 133–34; Imports, and dollar credits, 138; International Banking Corporation, 244
Federal Reserve Bank Clearings,
Country checks, 18–24; Branch banks needed, 19; Federal Reserve system, 19–20; Act of 1913, 20–21; Checks for collection, 21–22; Chicago bank schedule, 22; Member banks maintain balances, 22–23; Indorsement and presentation, 23–24; Presentation of check thru mail, 23–24; Collection charges, 24–27; N. Y. Clearing House rates, 25–26; New ruling of Clearing House Association, 26; Collection illustrated, 26–27; Summary of advantages, 28; Objections to new plan, 28–29; Success of system, 29–30; Gold Settlement Fund, 30–31
Finance Bills,
Definitions of, various, 144–45; When exchange rates decline, 145–48; Use of illustrated, 146–49; Loaning, 148–49; London account, 149; Other uses, 150; Relation to forward exchange, 151–54; Escher on futures, 152–54
Fixed Exchange,
Meaning of, 54; Basis of, 55; Conversion for, 56; Arithmetic involved, 58; Sterling exchange, 192, 193
Foreign Exchange and Exports,
Definition of, 32; International bal-

Foreign Exchange—continued
ances, 32–33; Origin of foreign indebtedness, 33; Principal operations, 33; Inland exchange similar to, 33–34; Gold shipment costs, 34–35; Essential points to study, 35–36; Mint par, how computed, 36–38; Par of exchange, 38–39; Import and export gold points, 39–41; War fluctuations, 41–42; Clearing house transactions, 42–43; Buying and selling, 43–44; Sterling exchange in New York, 44; Bills of exchange, 46; Sterling exchange rates, 47; Quotations, 52–54; Conversions, rules for, 55–58; Exports and imports interdependent, 120–22; Visible and invisible exports, 120–26; Origin and supply, 122–23; U. S. in account with the world, 124–27; Export and import, 125–26; Quotations by Marks, 127–28; Commercial bills of exchange, 128–29; Dollar credit financing, 130–31; Acceptances, and the banks, 131–33; Federal Reserve Act affects, 133–34; Letters of credit, 134–36

Foreign Exchange and Imports,
Commercial letters of credit, 137–39; British acceptance illustrated, 138–39; London credits, 140–43; Lloyd George on British acceptances, 142–43

Foreign Money Orders,
Method of remittance, 82; Specimen of sterling order, 84; Payments, 85–86; Redemption, 86

Foreign Remittances,
Travel, and immigrants' remittances home, 61–62, 86; Draft issues, advices for, 62–66; Draft costs estimated, 66–67; Travelers' checks, 67–74; Letters of credit, 74–82; Circular notes, 82, 83; Money orders, 82, 84–86; Mail remittances, 86–88

Forward Exchange,
Relation to finance bills, 151; Bank methods to protect, 151; Escher on trading in futures, 152–54

French Exchange,
Example of, 112–13; Paris market, 201; Latin Union, 201–02; Monetary system, 202–03; Stamp duty, 203–04; Rules for determining rate of interest, 204; Paris quotations, 204–05; Conversion in New York, 205–06; Fractions and the dollar amount, 206–07; Franc exchange table, 206–07; Profits, method and buying rules, 207–09; Purchasing long bills, 209–11; Interest table aids calculation, 209–11; Free gold market, 248

Futures, *See* Forward Exchange

George, Lloyd,
British credits and the war, 142–43; Britain's responsibility cited, 239–40

German Exchange,
Illustration of, 113–14; Berlin market, 212; Kinds of money, 212–13; Stamp duty circumvented, 213–14; *Giro conto* system, 214; Calculating interest, 214–16; Commercial usages, 215; Quotations, 216–17; American quotations, 216; Converting marks into dollars, 217; Converting dollars into marks, 218; Profits, 219; Purchasing long bills, 220; Interest table, 220–21; Gold market, 248; War's effect on, 276, 278, 279; Imports, 278; Gold to England for repayment, 279

Gold Exchange Basis, International standard, 222

Gold Exchange Standard,
Local currency for, 227; Sale of bills, 228

Gold Points,
Exchange rates for gold, 39–40; Import and export points, 39–40; Range between centers, 41

Gold Settlement Fund, Federal Reserve plan, 30–31

Gold Shipments,
Charges from New York, 9–10; Rate fluctuation, 16–17; Federal Reserve settlements, 30–31; Expense of, 34–35; Gold points, 39–40; Significance of, between New York to London, 40–41; Difference between gold point and demand rate, 90; Arbitrage transactions, 164–65; Banking practice, 174; London and New York prices, 175–76; From New York, 176–77; New York to Ottawa, 177–79; From Ottawa, returns on, 180–81; Imports from London since the war, 181–84; Export and import rates, 183–84; Great Britain, 248–49; From New York, 263; Thru Ottawa, 263–64; Anglo-French loan, 264–273; London

Gold Shipments—continued
and New York, 265; Gold payments by Germany, 279

Indebtedness, Cause of, between countries, 33
India, Exchange system in, 228
Inland Exchange,
Similarity to foreign, 33–34; Uniformity of charges, 35; Currency settlement for, 48
See also Domestic Exchange
Invisible Trade,
Foreign exchange methods, 120, 121–26; Net balance statement, 124–26; Exports and imports, 125–126
Interest, *See* Rates of Interest

Jacobs, L. M., on Bank acceptances, 132–33
Johnson, Joseph French,
Statement of U. S. in account with world, 124–27; Describes gold shipment, 176–77

Latin Union,
French monetary system, 201–02; Coinage, 202
Letter of Hypothecation, Documentary certificate, 112
Letters of Credit,
Issuance, 74; Domestic, 74, 77, 78; Foreign, 74, 79, 80; Payment to holder, 81; Advised and circular, 81–82; Commercial, 106–08, 137; Issue illustrated, 116; Payment on, 116–17; Example of export letters of credit, 134–36; Imports, 137 et seq.
See also Commercial Letters of Credit
London and New York as Financial Centers,
Relative supremacy, 238; Reasons for London's position, 239; Lloyd George's statement, 239–40; London's economic advantages, 240–41; Mail and cable service, 241–42; Time advantages, 242; Investment operations, 243; Seeking fortunes abroad, 244; Financial center of British empire, 245; London's credit, 246; Economic factors in London's position, 247; Free gold market, 247–49; Liquid discounting, 249; Foreign bank policy, 249–50; Investments adjust balances, 250; Tariff policies, 251; Mercantile navy, 251–52; British foreign trade, 252–53; New York's financial power, 254; Future responsibilities, 255–56
Long Exchange,
Bankers' long bills, 96, 101; Commercial long bills, 97, 100; Documentary bills, 97, 102–06; Clean bills of exchange, 97, 101; Finance bills, 144–50; Long bills, interest rate for, 166–67; Sterling rates, 195; French long bills, 209–10; German interest table, 220; Dutch long bills, 223

Mail Remittances, Transactions for, 86 88
Margraff, A. W.,
Summary of cable rates, by, 95–96; On Bills of exchange, 102–03; Bank of England rate stated, 171–73
Market Rate, Discounting methods, 168–69
Mint Par,
Monetary unit values, 36–37; How computed, 37; Between two countries, 38; Ratio of exchange, 38–39; Function in exchange rates, 49; How determined, 224–25; Metallic currency values, 281–92
Monetary System,
Sovereign the unit, 186; Quotations for silver, 186; Deterioration, 187; French exchange, 202–03; Germany, 212–13; Netherlands, 222; Mint par calculation, 224–25; Phillipines, 228; India, 228; Argentina, 229; Brazil, 230–32; China, 233–34; Great Britain, 247–49; Value of foreign coins, 281–86; Equivalents and money values, 287–91; Symbols, 292
Money,
Value of foreign coins, 281–86; Moneys and equivalents, 287–91; Symbols, 292
Moratorium,
British credits and the war, 142; Definition of, 259; Countries declaring, 260–61, 277; Germany's attitude, 261
Movable Exchange,
When implied, 54; Basis of, 55; Conversion for, 57; Arithmetic involved, 58; Sterling exchange rates, 192, 193

New York a Financial Center,
Position after the war, 238, 255; Present dominance, 254; Future responsibility, 255; Exchange with London, 262–65, 271; Canadian exchange, 274–75; U. S. loan to Canada, 275
New York Clearing House Association,
Bank rate ruling, 25–26; Charges illustrated, 26–27
New York Exchange in Denver,
Demand and supply, 4–7; Illustration, 6–7; Currency shipments, 7–9; Shipment costs, 10

Paper Currencies,
Value, and depreciation, 234; Interesting problems, 235; Countries on inconvertible paper basis, 235–36; Chile, 236
Paper Money,
Bank of England notes, 187, 188; Gold reserve in U. S., 187
Parity,
Quotations for, and arbitrage, 157–58; Stock prices, 158; Commodities, 159; Chain rule calculation, 159
Phillipines, Exchange practices of, 228

Quotations,
Newspaper announcements, 52; Exchange quoted in N. Y. market, 53; Range of units, 53–54; Davis and Brooks on, 54; Fixed and moveable exchange, 54–55; Exchange tables, 59, 127, 192; Parity tables, 157, 158; Foreign exchange in London, forms of, 191, 192, Course of exchange, 194; American, 195; French exchange, 204–05; Francs converted, 206, 207; Fractional, 206–07; German, 216; American, 216–17; Holland, 222–23
See also Exchange Quotations

Rates of Exchange,
Currency shipments, 9–10; When demand exceeds supply, 10–11; Quoted rates, 11; How determined, 16; Federal reserve collections, 24; New York Clearing House, 25–26; Definition of, 33; Mint par, pivotal point of, 36–38; Gold points, 39–40; Gold redemption for bills of exchange, 46–47; Sterling exchange cost, 47–48; What is meant by, 48; Transfer mediums, 49; Coinage ratio, 50; Fluctuations, 50–52; Rates correspond, 51–52; Newspaper quotations, 52; Exchange table, 53; Range of quotations, 53–54; Table shows profit, 54; Fixed and moveable, conversions for, 54–58; Arithmetic elementary, 58; Compiling tables, 59–60; Gold shipments, 174–83; London quotations, 191–93; Movable, 192, 193; Fixed exchange, 192, 193; War affects, 258–59; London and New York, 262–65; France, 266; Dutch, 268–69; Italy, 269; Russia, 269–70; Spain, 270; Scandinavia, 270; New York, 271–72; Canada, 275; Germany, 276–77, 279
Rates of Interest,
Exchange fluctuations, 166; Computing long bills, 166–67; Bank rate, 167–68; Market rate, 168–69; Retirement rate, 169; Bank of England rate, 169–73; Margraff on discount rate fluctuation, 171–73; French long bills, 209–10; Germany, 214–16; German table of, 220; Dutch exchange, 223–24; Gold shipments, 265–72
Retirement Rate, Discounting bills, 169

Scandinavian Union,
Monetary system, 277; Trade relations, 278–79; Germany's trade with, 278–79
Sight Drafts,
Demand exchange, 90–94; Specimen demand drafts, 91, 93; Bank transactions, 92, 94; German practice for, 215
Silver Standard,
Exponents of, decreasing, 232; China's monetary system, 233–34; Relative value of coins, 281–91
Sterling Exchange,
New York demand, 44; Cost of, 47–48; Demand sterling, example of selling, 110–11; Sterling purchased, 111–12; War causes demand for, 142; London market, 185–86; Monetary system, 186–87; Paper money, 187–88; Gold coinage, 188–90;

Sterling Exchange—continued
Stamp tax and interest, 190; London quotations, how published, 191–93; Rates of exchange, table for, 191–93; "Course of Exchange," table of rates, 193–95; American quotations, 195; Calculating conversions, 195–97; Figuring profit, 197–98; Special date purchases, table for, 198; Rate calculation, examples of, 199–200; Adjustments thru, 226; Gold standard, 227–28; Philippines, 228; India, 228; Argentina, 229; Great Britain, 247–53

Sub-Treasury Settlements, Currency shipment facilitated, 12

Traveler's Checks,
Convenience of, 67; Specimens, 68, 69; Terms of compliance, 70; Payment methods, 70–71; Redemption, 71–72; Letter of indication, 72–73; Loss risks, 73–74; Negotiability, 74; Method illustrated, 115–16, 117

United States in Account with the World,
Foreign exchange statement, 124–26; Exports and imports, 125–27; Quotations, 127

Visible Trade,
Exports, 120, 125, 126; Disparity between imports and exports, 121, 125

War and the Exchanges,
London credits, and imports, 141–43; Gold imports, and Bank of England; 181–83; Capital supplied by United States, 226–27; International exchange, how affected, 238, 257–59; Course of events, 258–59; Business paralyzed; 259; Moratoria, countries declaring, 259–61. 277; Exchange groups, 262; London and New York operations, 262; Gold shipments from New York, 263; Payments thru Ottawa, 263–64; Anglo French loan, 264; New York loans to Great Britain, 265; Sterling exchange at premium, 265–66; French securities, 266; Table of pound sterling values, 267; Dutch exchange, 268–69; Rates in Italy, 269; Russian rate, 269–70; Sterling exchange in Spain, 270; Scandinavian exchange, 270; New York's rate with different nations, 271; New York and Paris, 272; Export and import needs, 272–74; American dollar, appreciation of, 273; Holland's maritime trade, 273–74; Canada's foreign exchange, 274–75; Germany's credit decline, 276–77; Scandinavian Union, 277–79; German trade with Scandinavia, 278–79

THE·PLIMPTON·PRESS
NORWOOD·MASS·U·S·A

UC SOUTHERN REGIONAL LIBRARY FACILITY
AA 001 020 803 1